Register your product and get support at

www.philips.com/welcome

PFL40x7H/12
PFL40x7K/12
PFL40x7T/12
PFL40x7H/60
PFL40x7T/60

EN User Manual

PHILIPS

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1 Get started

TV tour

High Definition TV

Your TV is equipped with a High-Definition (HD) display so you can watch HD video in these ways and more:

- a Blu-ray disc player, connected with an HDMI cable, playing a Blu-ray disc
- an upscaling DVD player, connected with an HDMI cable, playing a DVD disc
- an over-the-air HD broadcaster (DVB-T or DVB-T2 MPEG4)
- a digital HD receiver, connected with an HDMI cable, playing HD content from a cable or satellite operator
- an HD game console, connected with an HDMI cable, playing HD games

Watch an HD demo clip

To experience the stunning sharpness and picture quality of your HD TV, watch the HD video clip available from the Home menu.

Press ⌂ > **[Setup]** > **[Watch demos]**.

For information about the availability of HD channels in your country, contact your Philips dealer or see **www.philips.com/support**.

Smart TV

You can make your TV the centre of your digital life with the Smart TV suite of applications:

- If you connect your TV to the home network, you can share movies, pictures and music from a computer or media server on your home network.
- If you connect your TV to the Internet, you can enjoy a wealth of streaming movies, pictures, music and much more with Youtube and other Smart TV applications.
- While you're watching a digital channel, you can pause TV at any time and catch up with the broadcast later. The broadcast is stored on a USB hard disk or streamed through catch-up TV applications in Smart TV.
- If you connect your TV to the Internet, you can record your favourite TV show on a USB hard disk.
- You can use Philips smartphone control from your iPhone or Android phone to control your TV.
- Add a new dimension to your calls and contact your friends and relatives on the big screen. You can make video calls on your TV with a Philips HD Media box and a Philips TV video camera (both sold separately). Enjoy HD video and excellent sound quality from the comfort of your settee and start calling now!

Media playback

If you connect your TV to a USB storage device, you can enjoy your movies, music and pictures on a wide screen TV with excellent sound.

You can also connect your PC to the TV with an HDMI or VGA cable.

Programme guides

You can find out what's on and what's coming up with the now and next EPG (Electronic Programme guide) or eight day EPG.

Programme guides are provided by broadcasters or over the Internet. If you connect your TV to the Internet, you can access more extensive programme details.

EasyLink

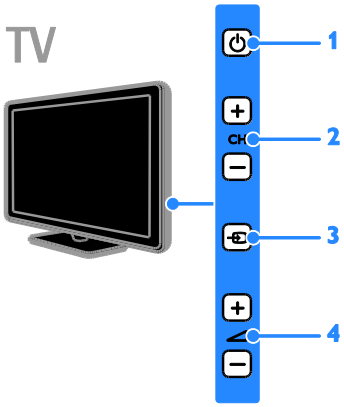
If you connect your TV to HDMI-CEC (Consumer Electronic Control) enabled devices, such as a Blu-ray player or home theatre, you can control them at the same time with one remote control. Simply switch on EasyLink after connection.

Intuitive menus

With the TV's intuitive menus, you can easily access the channel or media file that you want or tweak the TV settings to suit your needs.

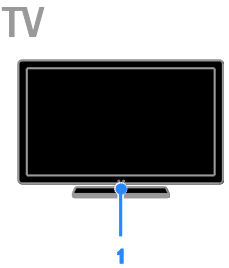
TV controls

Rear controls



1. ⏻: Switch the TV on or off.
2. **CH +/-:** Switch to the next or previous channel.
3. **⇥:** Select a connected device.
4. **+/-:** Increase or decrease volume.

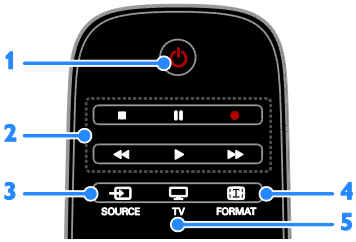
Sensors



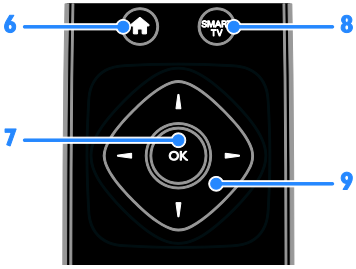
1. Remote control sensor

Point the remote control at the sensor. Make sure that the line of sight between the remote control and the TV is not blocked by furniture or other objects.

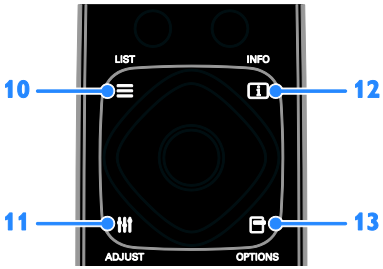
Remote control



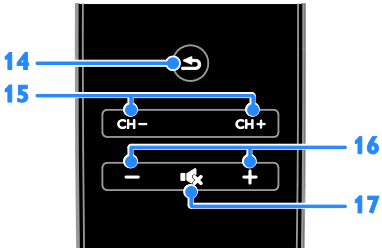
1. ⏻ (**Standby**): Switch the TV on or to standby.
2. **Play buttons:** Control playback of media files.
3. **SOURCE:** Access a connected device.
4. **FORMAT:** Change picture format.
5. **TV:** Switch source to watch TV.



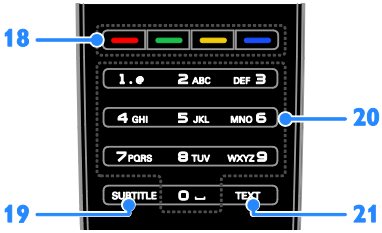
6. **(Home):** Access the Home menu.
7. **OK:** Confirm an entry or selection.
8. **SMART TV:** Access Smart TV features.
9. **▲▼◀▶ (Navigation buttons):** Navigate through menus and select items.



10. **LIST:** Access the TV channel list.
11. **ADJUST:** Access TV settings.
12. **INFO:** Display information about current activity.
13. **OPTIONS:** Access currently available options.



14. ⮌**(Back):** Return to the previous menu page or exit from a TV function.
15. CH - / CH +: Change channels.
16. +/-(Volume): Adjust volume.
17. 🔇**(Mute):** Mute or restore audio.



18. Colour buttons: Select tasks or options. The buttons function according to the services offered by the broadcaster.
19. SUBTITLE: Switch subtitles on or off.
20. 0-9(Numeric buttons): Select TV channels or enter text.
21. TEXT: Switch subtitles on or off.

EasyLink controls

Note: EasyLink controls are available when the connected device is HDMI-CEC compliant.

With EasyLink controls, you can control your TV and other HDMI-CEC devices with one remote control.

Access EasyLink controls

1. While you view content from a connected HDMI-CEC device, press ⊟ **OPTIONS**.
2. Select **[Show device keys]**, then press **OK**.
3. Select the EasyLink control button, then press **OK**.

Read more on EasyLink in **Use more of your TV > Use EasyLink** (Page 27).

Smartphone control

You can use your smartphone as a secondary remote, and even as a keyboard. You can also view a slideshow of the images in your smartphone on the TV. To download the application **'Philips My Remote'**, visit the Apple App store or the Android Market. Follow the instructions provided at the application store.

Ensure that your TV and smartphone are connected to the same local network. Read more on network connections at **Connect your TV > Network and the Internet** (Page 50).

Important information

Safety

Read and understand all instructions before you use your TV. If damage is caused by failure to follow the instructions, the warranty does not apply.

Risk of electric shock or fire!

- Never expose the TV to rain or water. Never place liquid containers, such as vases, near the TV. If liquids are spilt on or into the TV, disconnect the TV from the power outlet immediately. Contact Philips Consumer Care to have the TV checked before use.
- Never place the TV, remote control or batteries near naked flames or other heat sources, including direct sunlight. To prevent the spread of fire, keep candles or other flames away from the TV, remote control and batteries at all times.

- Never insert objects into the ventilation slots or other openings on the TV.

- Never expose the remote control or batteries to rain, water or excessive heat.
- Avoid force coming onto power plugs. Ensure that the power plug is fully inserted into the power socket. Loose power plugs can cause arcing or fire.
- When the TV is swivelled, ensure that no strain is exerted on the power cord. Strain on the power cord can loosen connections and cause arcing.
- To disconnect the TV from the mains power, the power plug of the TV must be disconnected. When disconnecting the power, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

Risk of damage to the TV!

- Two people are required to lift and carry a TV that weighs more than 25kg or 55lbs.
- When stand mounting the TV, use only the supplied stand. Secure the stand to the TV tightly. Place the TV on a flat, level surface that can support the combined weight of the TV and the stand.
- When wall mounting the TV, use only a wall mount that can support the weight of the TV. Secure the wall mount to a wall that can support the combined weight of the TV and wall mount. Koninklijke Philips Electronics N.V. bears no responsibility for improper wall mounting that result in accident, injury or damage.
- If you need to store the TV, disassemble the stand from the TV. Never lay the TV on its back with the stand installed.
- Before you connect the TV to the power outlet, ensure that the power voltage matches the value printed on the back of the TV. Never connect the TV to the power outlet if the voltage is different.
- Parts of this product may be made of glass. Handle with care to avoid injury and damage.

Risk of injury to children!

Follow these precautions to prevent the TV from toppling over and causing injury to children:

- Never place the TV on a surface covered by a cloth or other material that can be pulled away.
- Ensure that no part of the TV hangs over the edge of the surface.
- Never place the TV on tall furniture, such as a bookcase, without anchoring both the furniture and TV to the wall or a suitable support.
- Educate children about the dangers of climbing on furniture to reach the TV.

Risk of swallowing batteries!

- The product/remote control may contain a coin-type battery, which can be swallowed. Keep the battery out of reach of children at all times!

Risk of overheating!

- Never install the TV in a confined space. Always leave a space of at least 4 inches or 10 cm around the TV for ventilation. Ensure that curtains or other objects never cover the ventilation slots on the TV.

Risk of injury, fire or power cord damage!

- Never place the TV or any objects on the power cord.
- Disconnect the TV from the socket and aerial before lightning storms. During lightning storms, never touch any part of the TV, power cord or aerial cable.

Risk of hearing damage!

- Avoid using earphones or headphones at high volumes or for prolonged periods of time.

Low temperatures

- If the TV is transported in temperatures below 5°C or 41°F, unpack the TV and wait until the TV temperature matches room temperature before connecting the TV to the power outlet.

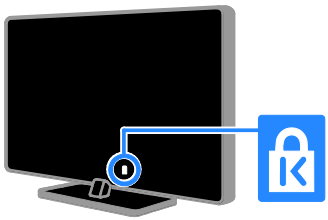
Screen care

- Risk of damage to the TV screen! Never touch, push, rub or strike the screen with any object.

- Unplug the TV before cleaning.
- Clean the TV and frame with a soft damp cloth. Never use substances such as alcohol, chemicals or household cleaners on the TV.
- To avoid deformations and colour fading, wipe off water drops as soon as possible.
- Avoid stationary images as much as possible. Stationary images are images that remain onscreen for extended periods of time. Stationary images include onscreen menus, black bars, time displays, etc. If you must use stationary images, reduce screen contrast and brightness to avoid screen damage.

Lock the TV

Your TV is equipped with a Kensington security slot at the base of the TV. To secure the TV, purchase a Kensington anti-theft lock (sold separately).



Notice

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The material in this manual is believed adequate for the intended use of the system. If the product, or its individual modules or procedures, are used for purposes other than those specified herein, confirmation of their validity and suitability must be obtained. Philips warrants that the material itself does not infringe any United States patents. No further warranty is expressed or implied.

Terms of warranty

- Risk of injury, damage to TV or void of warranty! Never attempt to repair the TV yourself.
- Use the TV and accessories only as intended by the manufacturer.
- The caution sign printed on the back of the TV indicates risk of electric shock. Never remove the TV cover. Always contact Philips Customer Care for service or repairs.

- Any operation expressly prohibited in this manual, or any adjustments and assembly procedures not recommended or authorised in this manual shall void the warranty.

Pixel characteristics

This LCD product has a high number of colour pixels. Although it has effective pixels of 99.999% or more, black dots or bright points of light (red, green or blue) may appear constantly on the screen. This is a structural property of the display (within common industry standards) and is not a malfunction.

Compliance with EMF

Koninklijke Philips Electronics N.V. manufactures and sells many products targeted at consumers which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals.

One of Philips' leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the Electro Magnetic Field (EMF) standards applicable at the time of producing the products.

Philips is committed to develop, produce and market products that cause no adverse health effects. Philips confirms that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.

Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardisation for early integration in its products.

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ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

All other registered and unregistered trademarks are the property of their respective owners.

Sustainability

Energy efficiency

This TV is designed with energy-efficient features. To access these features, press the **Green button** on the remote control.

- **Energy saving picture settings**: You can apply a combination of energy saving picture settings. While you watch TV, press the **Green button** and select **[Energy saving]**.
- **Screen off**: If you only want to listen to audio from the TV, you can switch off the TV display. Other functions continue to operate normally.
- **Light sensor**: When the surrounding light darkens, the built-in ambient light sensor lowers the brightness of the TV screen.

- **Low standby power**: The advanced power circuitry reduces the power consumption of the TV to an extremely low level, without losing out on the constant standby functionality.
- **Power management**: An advanced power management system helps save the energy consumed by this TV. To view how your personalised TV settings affect the TV's relative power consumption, press ⌂, then select **[Setup] > [Watch demos] > [Active Control]**.

End of use

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means that the product is covered by the European Directive 2002/96/EC. Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. Correct disposal of your old product helps to prevent potential negative consequences for the environment and human health.

Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed of with normal household waste. Please inform yourself about the local rules on separate collection of batteries because correct disposal helps to prevent negative consequences for the environment and human health.

EU energy label

The European Energy Label informs you on the energy efficiency class of the product. The greener the energy efficiency class of this product is, the lower the energy it consumes.

On the label, you can find the energy efficiency class, the average power consumption of the product in use and the average energy consumption for 1 year. You can also find the power consumption values for the product on the Philips website for your country at **www.philips.com/TV**.

Help and support

Use Help

To access the onscreen Help menu, press the **Yellow button**.

To switch between the Help menu and the TV menu, press the **Yellow button**.

Visit the Philips website

If you can't find what you need in the onscreen **[Help]**, visit the Philips support website at **www.philips.com/support**.

On the Philips support website, you can also:

- Find answers to Frequently Asked Questions (FAQ)

- Download a printable PDF version of this user manual
- Email us a specific question
- Chat online with our support personnel (available in certain countries only)

Search the TV forum

Your question may have already been answered by the Philips TV community of users. Visit **www.supportforum.philips.com**.

Contact Philips

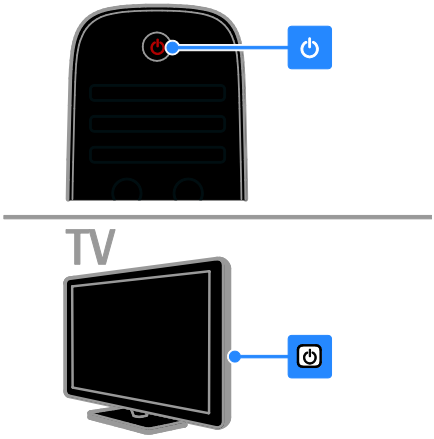
You can contact Philips Consumer Care in your country for support. The number is available in the leaflet accompanying this product or online at **www.philips.com/support**.

Before you contact Philips, write down the model and serial number of your TV. You can find this information on the back of your TV or on the TV packaging.

2 Use your TV

Watch TV

Switch TV on or off



Switch the TV on

- Press the power switch on the TV.
- If the TV is in standby, press ⏻ on the remote control.

Note: There is a short delay before the TV responds.
Tip: If you cannot find your remote control and want to switch on the TV from standby, press **CH +/-** on the TV.

Switch TV to standby

Press ⏻ on the remote control.
The remote control sensor on the TV switches to red.

Switch off the TV

Press ⏻ on the TV.
The TV switches off.

Note: Though your TV consumes very little energy when it is in standby or switched off, it does use some energy. If you are not going to use the TV for an extended period of time, disconnect the TV from the mains plug.

Automatic switch off

You can save energy with this TV's energy efficiency settings. The settings are enabled by default, so that if there is no user interaction (such as pressing a remote control button or a control on the front panel) for four hours, the TV will automatically switch to standby.

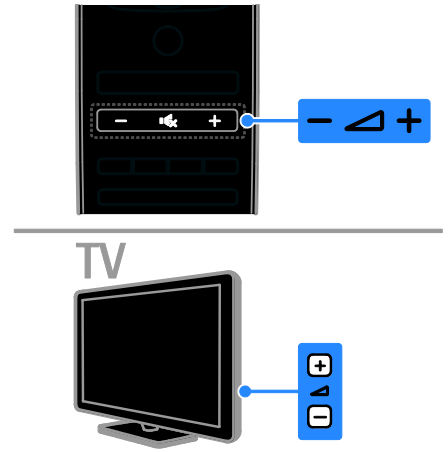
To disable automatic switch off

1. While you watch TV, press the **Green button** on the remote control.
2. Select **[Auto switch off]**, then press **OK**.
A confirmation message is displayed.

Adjust TV volume

Increase or decrease the TV volume

- Press **+/-** on the remote control.
- Press **+/-** on the side of the TV.



Mute or unmute the TV volume

- Press 🔇 to mute the TV.
- Press 🔇 again to restore the volume.

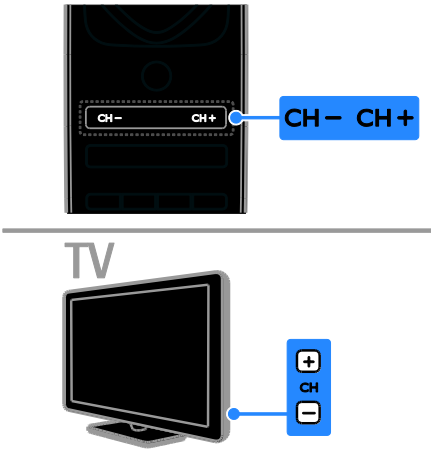
Adjust headphone volume

1. Press ⌂ > **[Setup]** > **[TV settings]** > **[Sound]**.
2. Select **[Headphones volume]**, then press **OK**.
3. Press the **Navigation buttons** to adjust the volume.

English

Switch TV channels

- Press **CH +/-** on the remote control or TV.
- Press the **Numeric buttons** to enter a channel number.



Manage favourites

You can view all channels or only a list of your favourite channels so that you can find them easily.

Press ☰ **LIST** to access the channel list.

Create a list of your favourite channels

1. Press ☰ **LIST**.
2. Select the channel to mark as a favourite, then press ⊟ **OPTIONS**.
3. Select **[Mark as favourite]**, then press **OK**.

The selected channel is marked with a star.

To remove a channel from the favourites list, select **[Unmark as favourite]**, then press **OK**.

Select a channel list

1. Press ☰ **LIST**, then press ⊟ **OPTIONS**.
2. Select **[Select list]** > **[Favourites]** to display channels in the favourite list or **[All]** to display all channels.
3. Press **OK** to confirm.

Manage channel lists

After the channels have been installed, you can manage them:

- Rename channels
- Reorder channels
- Hide or unhide channels
- Listen to digital radio

Rename channels

You can rename the channels. The name appears when the channels are selected.

1. While you watch TV, press ☰ **LIST**.

The channel list is displayed.

2. Select the channel to rename, then press ⊟ **OPTIONS**.
3. Select **[Rename]**, then press **OK**.
4. Press the **Navigation buttons** to select each character, then press **OK**.

Tips:

- You can press **OK** in the entry screen to enable the **Onscreen Keyboard**.
- Press **[ABC]** or **[abc]** to switch between uppercase and lowercase letters.

5. Once complete, select **[Done]**, then press **OK** to confirm.
6. Press ⮌ to exit.

Reorder channels

After the channels have been installed, you can reorder the channel list.

1. While you watch TV, press ☰ **LIST**.

The channel list is displayed.

2. Select the channel to reorder, then press ⊟ **OPTIONS**.
3. Select **[Reorder]**, then press **OK**.
4. Press the **Navigation buttons** to move the highlighted channel to another location, then press **OK**.
5. Select one of the following options, then press **OK**.

- **[Insert]**: Insert the channel into the desired location.
- **[Swap]**: Swap location with another channel.

6. Once complete, press ⊟ **OPTIONS**, then select **[Exit]**.

Hide channels

You can prevent unauthorised access to channels by hiding them from the channel list.

1. While you watch TV, press ☰ **LIST**.
2. Select the channel to rename and press ⊟ **OPTIONS**.

3. Select **[Hide channel]**, then press **OK**.
The channel is hidden.

Unhide channels

1. While you watch TV, press ☰ **LIST**.
2. Press ▭ **OPTIONS**.
3. Select **[Show hidden channels]**, then press **OK**.
Hidden channels appear in the channel list, but the channel information is not displayed.
4. Select a hidden channel, then press ▭ **OPTIONS**.
5. Select **[Unhide all]**, then press **OK**.
All hidden channels are displayed and can be watched.

Listen to digital radio

If digital radio channels are available, you can listen to them. They are installed automatically when you install TV channels.

1. While you watch TV, press ☰ **LIST**. The channel list is displayed.
2. Press ▭ **OPTIONS**.
3. Select **[Select list]** > **[Radio]** , then press **OK**.
4. Select a radio channel, then press **OK**.

Select a source

You can watch a connected device in one of the following ways:

- Add its icon to the Home menu.
- Select from the Source menu.

Note: If you connect an HDMI-CEC compliant device to the TV, it is automatically added to the Home menu.

Add new device

1. Connect and switch on the device.
2. Press ⌂.
3. Select **[Add your devices]**, then press **OK**.
4. Follow the onscreen instructions.
If you are prompted to select the TV connection, select the connector that this device uses.

View from Home menu

After you have added the new device to the Home menu, you can select its icon to start using it.

1. Press ⌂.
2. Select the device icon from the Home menu.
3. Press **OK** to confirm.

View from Source menu

You can also press ⇥ **SOURCE** to display a list of connector names. Select the connector that connects the device to the TV.

1. Press ⇥ **SOURCE**.
2. Press the **Navigation buttons** to select a connector in the list.
3. Press **OK** to confirm.

Use smart settings

Your TV comes with smart picture and sound settings. You can apply these settings or customise them.

Select your preferred picture setting

1. While you watch TV, press ⫶⫶ **ADJUST**.
2. Select **[Smart picture]**.
3. Select one of the following settings, then press **OK**:

- **[Personal]**: Apply your personalised picture settings.
- **[Vivid]**: Rich and dynamic settings, ideal for daytime viewing.
- **[Natural]**: Natural picture settings.
- **[Cinema]**: Ideal settings for movies.
- **[Game]**: Ideal settings for games.
- **[Energy saving]**: Settings that conserve the most energy.
- **[Standard]**: Default settings that suit most environments and types of video.
- **[Photo]**: Ideal settings for photos.
- **[Custom]**: Customise and store your own picture settings.

Select your preferred sound setting

1. While you watch TV, press ⫶⫶ **ADJUST**.
2. Select **[Smart sound]**.
3. Select one of the following settings, then press **OK**:

- **[Personal]**: Apply your personalised sound setting.
- **[Standard]**: Settings that suit most environments and types of audio.
- **[News]**: Ideal settings for spoken audio, such as the news.
- **[Movie]**: Ideal settings for movies.

- **[Game]**: Ideal settings for games.
- **[Drama]**: Ideal settings for drama programmes.
- **[Sports]**: Ideal settings for sports.

Change picture format

You can change the picture format to suit the video source.

1. Press ADJUST.
2. Select **[Picture format]**, then press **OK**.
3. Select a picture format, then press **OK** to confirm.

The available picture formats depend on the video source:

- **[Auto fill]**: Adjust the picture to fill the screen (subtitles remain visible). Recommended for minimal screen distortion but not for HD or PC.
- **[Auto zoom]**: Enlarge the picture to fill the screen. Recommended for minimal screen distortion but not for HD or PC.
- **[Super zoom]**: Remove the black bars on the sides of 4:3 broadcasts. Not recommended for HD or PC.
- **[Movie expand 16:9]**: Scale 4:3 format to 16:9. Not recommended for HD or PC.
- **[Wide screen]**: Stretch 4:3 format to 16:9.
- **[Unscaled]**: Provide maximum detail for PC. Only available when PC mode is selected in the picture menu.

View programme guide

From broadcaster

You can view information about digital TV channels using programme guides provided by broadcasters. This information can include:

- Channel schedules for the day ('Now and next') or up to 8 days, if supported by your broadcaster
- Synopsis of programmes

Note: Programme guides are available in certain countries only.

Set programme guide

Before you use the programme guide, check the following settings:

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Programme guide]**.
3. Select **[From the broadcaster]**, then press **OK**.

Access the TV programme guide

1. Press .
2. Select **[Programme guide]**, then press **OK**.

Use TV programme guide options

You can customise the displayed information to:

- Remind you when programmes start
- Display only preferred channels

1. In the programme guide, press OPTIONS.
2. Select an option, then press **OK**:

- **[Set reminder]**: Set programme reminders.
- **[Clear reminder]**: Clear programme reminders.
- **[Change day]**: Select the day to display.
- **[More info]**: Display programme information.
- **[Search by genre]**: Search TV programmes by genre.
- **[Scheduled reminders]**: List programme reminders.

From the Internet

If your TV is connected to the Internet, you can receive programme guides over the Internet. Internet programme guides include:

- Channel schedules
- Synopsis of programmes

Note: Availability of Internet programme guides is dependent on your broadcaster.

Set programme guide

Before you use the programme guide, check the following settings:

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Programme guide]**.
3. Select **[From network]** then press **OK**.

Access the TV programme guide

1. Press ⌂.
2. Select **[Programme guide]**, then press **OK**.

Note: If you are viewing the programme guide for the first time, follow the onscreen instructions to update the guide.

Use TV programme guide options

You can use the programme guide to:

- Schedule recordings of programmes
- Identify channels
- Enable subtitles when available
- Show onscreen remote control

1. In the programme guide, press ☐ **OPTIONS**.
2. Select an option, then press **OK**:

- **[Record]**: Set a scheduled recording.
- **[Identify channel]**: Manually update channel information.
- **[Select day]**: Select the day to display.
- **[Manual record]**: Set a scheduled recording.
- **[Show remote control]**: Display onscreen remote control.
- **[Reload page]**: Refresh the page display.
- **[Zoom page]**: Change zoom level of page display.
- **[Security info]**: Display programme security information.
- **[Subtitles]**: Enable or disable subtitles when available.

View media

What you can do

You can play videos, photos and music on your TV from:

- Your computer, connected through the home network
- A USB device connected to the TV

Note:

If the apparatus does not return to DLNA mode due to external electrical disturbances (e.g. electrostatic discharge), user intervention is required.

Play files from computer

What you need

- A wired or wireless home network, connected with a Universal Plug and Play (uPnP) router
- Philips wireless USB adapter (PTA01) for WiFi-ready models, or a LAN cable that connects your TV to your home network
- A media server program running on your computer
- Appropriate settings on your computer firewall to allow you to run the media server program

Set up the network

1. Connect your TV and the computer to the same home network. See **Connect your TV > Network and the Internet (Page 50).**

2. Switch on your computer and the router.

Set up media sharing

1. Install a media server program on your computer to share media files. Some of the media server programs available are as follows:

- **For PC:** Windows Media Player 11 (or higher) or TVersity
- **For Mac:** Twonky

2. Switch on media sharing on your computer using the media server. For more information on how to set up the media server, refer to the media server's website.

Play files

1. Press ⌂ on the remote control.
2. Select **[Your network]**, then press **OK**. If the network installation starts, follow the onscreen instructions.

3. Select a file from the content browser, then press **OK** to start play.
4. Press the **Play buttons** on the remote control to control play.

Play files from USB

If you have photos, videos or music files on a USB storage device, you can play the files on TV.

Caution:

- Philips is not responsible if the USB storage device is not supported, nor is it responsible for damage or loss of data in the device.
- Do not overload the USB port. If you connect a USB storage device that consumes more than 500mA power, make sure that it is connected to its own external power supply.

View USB contents

1. Connect the USB device to the USB connector on the TV.
2. Press ⌂, select **[Browse USB]**, then press **OK**.
3. Select a file from the content browser, then press **OK** to start play.
4. Press the **Play buttons** on the remote control to control play.

Play options

Watch video

Press the **Navigation buttons** to select a video file, then press **OK.**

- Press ❚❚ to pause video.
- Press ■ to stop video.
- Press ▶▶ or ◀◀ to search forward or backward within a video.
- Press **CH -** / **CH +** to skip to the previous or next video.
- Press and hold ⮌ to exit the content browser.

Video playback options

While you play video, press ☐ **OPTIONS** to access the following video options:

- **[Stop]**: Stop playback.
- **[Repeat]**: Repeat a video.
- **[Shuffle on]** / **[Shuffle off]**: Enable or disable random play of videos.
- **[Show info]**: Display the file information.

Listen to music

Press the **Navigation buttons** to select a music track, then press **OK**.

- Press ❚❚ to pause.
- Press ■ to stop.
- Press ▶▶ or ◀◀ to search forward or backwards within a music track.
- Press **CH -** / **CH +** to skip to the previous or next video.
- Press and hold ⮌ to exit content browser.

Music playback options

Press ☐ **OPTIONS** to access or exit the following music options:

- **[Stop]**: Stop audio play.
- **[Repeat]**: Repeat a track or an album.
- **[Play once]**: Play the track once.
- **[Shuffle on]** / **[Shuffle off]**: Enable or disable random play of tracks.
- **[Show info]**: Display the file information.

View pictures

Press the **Navigation buttons** to select a picture, then press **OK** to start the slideshow.

- Press ❚❚ to pause.
- Press ■ to stop.
- To pause or stop the slideshow, press **OK**.
- To skip to the previous or next file, press **CH -** or **CH +**.
- Press and hold ⮌ to exit the content browser.

Picture slideshow options

Press ☐ **OPTIONS** to access or exit the following picture options:

- **[Show info]**: Display the file information.
- **[Stop]**: Stop slideshow.
- **[Rotate]**: Rotate the file.
- **[Repeat]**: Repeat the slideshow.
- **[Play once]**: Play the file once.
- **[Shuffle off]** / **[Shuffle on]**: Enable or disable random display of pictures in the slideshow.
- **[Slideshow speed]**: Set the display time for each picture in the slideshow.
- **[Slideshow transition]**: Set the transition from one picture to the next.
- **[Set as Scenea]**: Set the selected picture as wallpaper on TV. See **Use more of your TV > View Scenea > Load TV wallpaper** (Page 30).

Browse Smart TV

What you can do

With Internet Applications (apps), which are specially adapted Internet websites for your TV, you can enjoy these features and more:

- Read newspaper headlines
- Watch and rent videos
- Check weather forecasts
- Catch up with TV programmes that you missed

Find out more on Smart TV services from the Smart TV forum website, www.supportforum.philips.com.

Note:

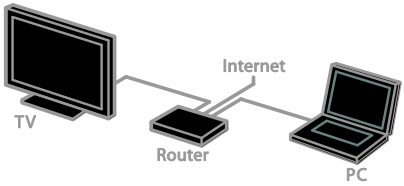
- Smart TV services and apps vary from country to country.
- Availability of catch-up TV apps and their TV programmes is subject to your TV's country setting. To find out which TV programmes are available, access the TV programme guide within the app.
- Smart TV displays one page at a time, in full screen.
- Certain websites may not display completely. Functions that require plug-ins may be unavailable.
- Koninklijke Philips Electronics N.V. bears no responsibility regarding the content and the quality of the content provided by the content service providers.

What you need

1. On your home network, connect the TV to the Internet.
2. On your TV, configure Smart TV.
3. (Optional) On your PC, register with Philips to enjoy exclusive benefits and receive updates on product information. You can register at any time.

Connect the TV to the Internet

1. On your home network, connect a router with a high-speed connection to the Internet.
2. Switch on the router.
3. Install the network. See **Connect your TV > Network and the Internet** (Page 50).



Start Smart TV

1. Press ⌂, select **[Smart TV]**, then press **OK**.

The terms and conditions of use are displayed.

2. Follow the onscreen instructions to complete registration.

You can also press **SMART TV** on the remote control to access Smart TV.

Note: The first time you start Smart TV, a prompt asks if you want to enable parental control to lock adult apps. If you lock an adult app, advertisements and web pages that are not adapted for Smart TV will remain accessible.

Access Smart TV Applications (Apps)

You can access apps through the Smart TV home page. The icons on this page represent the apps installed on your TV.

- Press the **Navigation buttons** to select an app for access, then press **OK** to confirm.
- Select **[App Gallery]** to add more apps to your home screen.
- Browse Internet websites with Internet apps.
- Read the Smart TV quick guide on the Smart TV home page for more information.

Add apps

1. Select **[App Gallery]** > , then press **OK**.
2. Use the **Navigation buttons** to search for apps.
3. Select an app, then press **OK** to add it to your home screen.

Tips:

- You can search for apps available in other countries.
- To return to the Smart TV home page, press ☰ LIST.

Note: Smart TV services are updated automatically. To view the latest updates, change [All] to [New] in [App Gallery].

Access websites

1. Select an Internet app, then press OK.
2. Select the web address field, then press OK.

A keyboard appears on the screen.

3. Press the Navigation buttons and OK to enter each character of the web address.

Tip: You can also use the Numeric buttons on the TV remote control to enter a web address.

Zoom page

To zoom in and out on an Internet page, do the following:

1. Press ▭ OPTIONS, then press [Zoom page].
2. Use the slider bar to set the enlargement.
3. Use the Navigation buttons to jump between highlighted items and scroll through an Internet page.

Scroll pages

Press P+ and P- to scroll up and down on a web page.

Reload page

If a page does not load correctly, press ▭ OPTIONS, then select [Reload page].

View security info

To view security information about a page, press ▭ OPTIONS, then select [Security info].

Smart TV options

Press ▭ OPTIONS and access any of the following items to modify the apps from the Smart TV home screen:

- [Remove App]
- [Lock App]
- [Unlock App]
- [Move App]

Clear Smart TV memory

You can clear the Smart TV memory completely, including your favourites, parental control code, passwords, cookies and history.

Warning: This option resets the Smart TV memory completely. It also deletes the settings of other interactive applications such as MHEG, HbbTV, and MHP.

1. Press ⌂.
2. Select [Setup] > [Network settings].
3. Select [Clear Apps memory], then press OK.

Rent online videos

What you can do

With this TV, you can rent a video from online video store apps in Smart TV. You can rent a video using the following steps:

1. Open a video store app. You may need to register or enter your log-in information.
2. Select a video.
3. Make the online payment.
4. Download the video for viewing.
5. Start watching the video.

What you need

- Make sure that your TV is connected to the Internet through a high-speed broadband connection. See **Connect your TV > Network and the Internet** (Page 50).
- Connect a USB flash drive with a minimum capacity of 4 GB to the TV. For high-definition videos, use a flash drive with at least 8 GB of storage capacity.

Note: You can also use a single storage device to record, pause and rent videos. Connect a USB 2.0 compatible hard disk drive (HDD) with a minimum capacity of 250 GB and a minimum transfer speed of 30 megabytes per second. See **Use more of your TV > Record TV shows > Install USB hard drive** (Page 23).

Format the USB flash drive

Before you download rented videos, your USB drive must be formatted. All existing content on the USB drive is erased.

1. Switch on the TV.
2. Connect the USB flash drive to a USB slot on the TV.
3. Press ❚❚ to start formatting the drive.
4. After formatting, leave the USB drive connected to the TV.

Access a video store

1. Press ⌂ > **[Smart TV]**, then press **OK**. You can also press **SMART TV** on the remote control.
2. Access the **[App Gallery]** to search for available video store apps in your country.
3. Press the **Navigation buttons** to select a store, then press **OK** to confirm.
The icon of the video store is added to the home page.
4. To view a store, select its icon and press **OK**.

Rent a video

To rent a video, open the video store app and locate the video. Follow the onscreen instructions to rent, pay for and download the video.

Note: The way you select and rent a video varies from store to store. Consult the video store website for more information.

Payment

The store prompts you to log in or to open a new account if you do not have one. The login might consist of your email address and a personal PIN code. When you are logged in, you can select the payment method, a credit card, or a value code in most cases.

Download the video

When you have paid, you can download the video on to the video memory. While the video downloads, you can continue watching a TV programme until the TV notifies you that the video is ready to play.

If you cancel a download, you can still return to download the video before the rental period expires.

Watch video

1. Press **SMART TV** on the remote control to access Smart TV.
The installed video stores are displayed on the home screen.
2. Select the video store where you rented the video, then press **OK**.
3. With your log-in information, enter the online video store.
4. Select the video from the list of downloaded videos, then press **OK** to play.

Interactive TV

What you can do

With interactive TV, you can view additional information or entertainment pages provided by digital TV broadcasters. You can experience true interactivity by responding directly to the digital content.

Note: You cannot download files to your TV with this feature.

Broadcasters use various interactive TV systems such as:

- HbbTV (Hybrid Broadcast Broadband TV)
- iTV (Interactive TV - MHEG)
- MHP (Multimedia Home Platform)
- DTVi (Digital TV interactive)

Visit the broadcaster's website for more information to see which interactive system is available in your country.

Here are some examples of interactive activities you can enjoy:

- View information about TV programmes
- Take part in a quiz or competition
- Play games
- Shop online
- Pay for a video-on-demand (VOD) programme
- Vote
- Chat

What you need

To enjoy this service, you need the following:

- digital channels with interactive services
- A wired or wireless home network, connected with a Universal Plug and Play (uPnP) router

For network connection, see **Connect your TV > Network and the Internet** (Page 50).

Access interactive TV

Most channels that offer interactive services invite you to press the **Red button** or **OK** to open their interactive programme.

1. Switch to a digital channel with interactive services.
While the application is loading, a blinking symbol is displayed. When the application has loaded, an icon is displayed.

2. Press the **Red button** or **OK** to launch the interactive application.
3. Follow the onscreen instructions.
4. Press ⮌ or the onscreen button to close the interactive page.

To navigate the interactive pages, use:

- The **Navigation buttons**
- The **Colour buttons**
- The **Numeric buttons**
- ⮌

To control video play within interactive pages, press:

- ▶ to play
- ❚❚ to pause
- ■ to stop

To block HbbTV on a channel:

1.Press ▭ **OPTIONS**.
2. Select **[HbbTV on this channel]** > **[Off]**.

To block HbbTV on all channels:

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[HbbTV]** > **[Off]**.

3 Use more of your TV

Pause TV

What you can do

While you watch a digital channel, you can pause a programme to answer a phone call or to have a break. The broadcast is stored on a USB hard drive that is connected to the TV. You can resume playback of the programme at any time.

Note:

- You can pause a programme for a maximum of 90 minutes.

What you need

- Tune your TV to receive digital channels. See **Set up your TV > Channel settings > Automatic install** (Page 32).
- Connect a USB 2.0 compatible hard drive with a minimum capacity of 32 GB and a minimum transfer speed of 30 MB per second.

Install USB hard drive

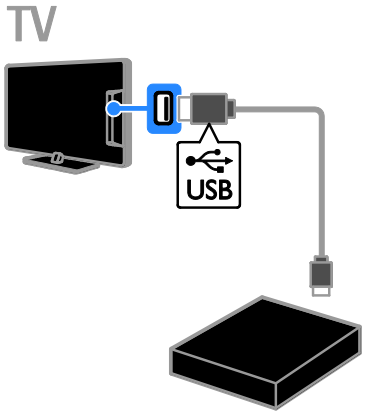
To pause TV, you must connect a USB hard drive to the TV and format it.

Caution:

- Philips is not responsible if the USB hard drive is not supported, nor is it responsible for damage or loss of data in the device.
- Formatting removes all data from the connected USB hard drive.
- The USB hard drive is formatted exclusively for this TV. Keep it permanently connected to the TV. You cannot access the USB hard drive contents from another TV or PC.
- Do not overload the USB port. If you connect a USB hard drive device that consumes more than 500mA power, make sure that it is connected to its own external power supply.

1. Make sure that the TV and the USB hard drive are switched off.
2. Make sure that there are no other USB devices connected to the TV.
3. Connect the USB hard drive directly to the TV, or if you intend to connect other USB devices in future, connect the USB hard drive through a USB hub.

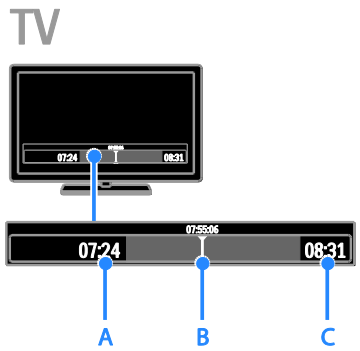
Note: While you are formatting the USB hard drive, do not connect other USB devices to the TV.



4. Switch on the TV and the USB hard drive, if it has an external power source.
5. Switch to a digital TV channel.
6. Press ❚❚ to start formatting.
7. Follow the onscreen instructions to complete the formatting process.

Warning: The formatting process may take some time. Do not switch off the TV or disconnect the USB hard drive until this process is complete.

Pause a live TV broadcast



1. On a digital channel, press ❚❚ to pause a TV programme.
2. Press ▶ to continue watching.

The status bar shows the following time indicators:
A. When the programme was paused for the first time.
B. Where the paused programme is currently playing.
C. Where the live programme is currently broadcast.

- To watch the stored broadcast, press ◀◀ or ▶▶ to search backward or forward.
- To change playback speed, press ◀◀ or ▶▶ repeatedly.
- To watch the live TV broadcast, press ■.

Note: You cannot pause the TV broadcast when a recording is in progress.

The stored broadcast on the USB hard drive is deleted if you do any of the following:

- Disconnect the USB hard drive.
- Start recording a TV programme.
- Access Smart TV
- Switch the TV to standby.
- Switch to another channel.
- Switch source to watch from a connected device - a Blu-ray disc player, digital receiver or USB storage device.

Record TV shows

What you can do

If your TV is connected to the Internet, you can record TV programmes onto a USB hard drive. You can either record current TV programmes or a future TV programme.

Start and manage the recordings from the electronic programme guide on the TV. See **Use your TV > View programme guide > From the Internet** (Page 14).

Note: Recording is only supported in countries with Internet programme guides.

What you need

To record TV programmes, do the following:

- Tune your TV to receive digital TV channels (DVB broadcast or similar). See **Set up your TV > Channel Settings > Automatic installation** (Page 32).
- Make sure that your TV is connected to the Internet through a high-speed broadband connection. See **Connect your TV > Network and the Internet** (Page 50).
- Connect a USB 2.0 compatible hard disk drive (HDD) with a minimum capacity of 250 GB and a minimum transfer speed of 30 megabytes per second.

Note: You can use the same HDD to record and Pause TV shows.

To check if the programme guide supports recording:

Press ⌂ and select **[Programme guide]**.
If you find the **[TV Recording]** button on the programme guide page, you can set up and manage recordings.

If you can't see the **[TV Recording]** button, make sure that the programme guide data is set to be updated through the network. Select ⌂ > **[Setup]** > **[TV settings]** > **[Preferences]** > **[Programme guide]** > **[From network]**.

Install USB hard drive

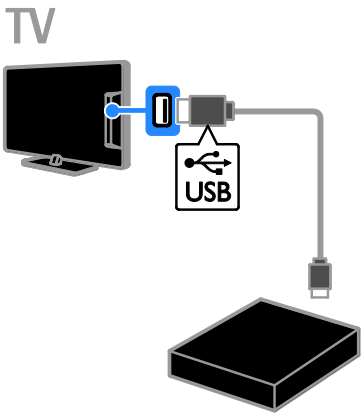
To record TV shows, you must connect a USB hard disk to the TV and format it.

Caution:

- Philips is not responsible if the hard disk is not supported, nor is it responsible for damage or loss of data in the device.
- Formatting removes all data from the connected hard disk.
- The USB hard drive is formatted exclusively for this TV. Keep it permanently connected to the TV. You cannot access the USB hard drive contents from another TV or PC.
- Do not overload the USB port. If you connect a USB hard drive device that consumes more than 500mA power, make sure that it is connected to its own external power supply.

1. Make sure that the TV and the USB hard drive are switched off.
2. Make sure that there are no other USB devices connected to the TV.
3. Connect the USB hard drive directly to the TV, or if you intend to connect other USB devices in future, connect the USB hard drive through a USB hub.

Note: While you are formatting the USB hard drive, do not connect other USB devices to the TV.



4. Switch on the TV and the USB hard drive, if it has an external power source.
5. Switch to a digital TV channel.
6. Press ❚❚ to start formatting.
7. Follow the onscreen instructions to complete the formatting process.

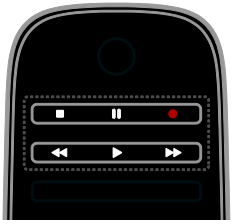
Warning: The formatting process may take some time. Do not switch off the TV or disconnect the USB hard drive until this process is complete.

Start recording

One-touch recording

To record the programme you are currently watching, you can use the ● button on the remote control:

1. While you watch TV, press ●.
Recording starts immediately. A pop-up window is displayed, where you can select the time when the recording ends.
2. Select **[Schedule]**, then press **OK** to confirm the end time.



To stop recording at any time, press ■.

Note:

- While recording, you cannot switch TV channels.
- While recording, you cannot pause the TV broadcast.

Schedule a TV programme recording

You can schedule a recording of an upcoming programme that will be broadcast today or in up to eight days' time.

1. Press ⌂ and select **[Programme guide]**.
2. Select the channel and programme to record.

- To scroll through programmes, use the **Navigation buttons**.
- To select a channel, enter the channel number.

- To change the date, select the date at the top of the page, then press **OK**. Select a date from the pop-up window, then press **OK**.

3. Select the programme, press **OPTIONS**, then select **[Record]**.
4. To record beyond the time when the programme is scheduled to end, change the recording time.
5. Select **[Schedule]** then press **OK**. The programme is scheduled for recording.
If you schedule overlapping recordings, a warning is displayed.

If you schedule recordings while you are away, make sure that you leave the TV in standby and keep the USB hard drive switched on.

Schedule a timed recording

To schedule a timed recording that is not linked to any programme:

1. Press **Home**, then select **[Programme guide]**.
2. Press **OPTIONS**, select **[Manual record],** then press **OK**.
3. Select the channel, date and time span in the dialogue box.
4. Select **[Schedule]**, then press **OK**.

Programme information

To view more information about a programme, select the programme from the programme guide and press **OK**. Depending on the status of this programme, you can start watching it, schedule its recording, play back the recording, or delete the recording from this page.

Watch recordings

After you've recorded a TV programme, you can watch it.

1. Press **Home**, select **[Programme guide]** > **[{0} Recordings]**, then press **OK**.
A list of recordings is displayed.
2. Select a recording from the list, then press **OK**.
The recording starts to play.

Note: In **[{0} Recordings]**, the number in brackets shows the number of complete recordings. If you see **[TV Recording]** instead, no recordings are complete.

You can control play with the **Play buttons** on the remote control:

- To play or pause, press ▶ or ❚❚.
- To search forward or backwards, press ▶▶ or ◀◀.
- To stop, press ■.

Note:

- If a broadcaster limits the number of days that a recording can be viewed after the programme has been broadcast, the list of recordings shows the number of days before the recording expires.
- If a recording has expired or if a broadcaster restricts playback, the recording cannot be played.

Manage recordings

To manage your recordings, view the list of complete and scheduled recordings.

1. Press **Home**, then select **[Programme guide]** > **[{0} Recordings]**, then press **OK**.
A list of recordings is displayed.

Note: In **[{0} Recordings]**, the number in brackets shows the number of complete recordings. If you see **[TV Recording]** instead, no recordings are complete.

From this list, you can:

- Select a recording to watch
- Delete a recording
- Schedule a timed recording
- Cancel a scheduled recording
- Check the remaining hard disk space

Cancel a scheduled recording

1. Select the recording, then press **OPTIONS**.
2. Select **[Cancel recording]** and press **OK**.

Delete a recording

1. Select the recording, then press **OPTIONS**.
2. Select **[Delete recording]**, then press **OK**.

Failed recordings

If a scheduled recording is prevented by the broadcaster or if the recording does not occur as per schedule, it is marked as **[Failed]** in the recordings list.

Play games

Add a game console

You can play games projected on your TV. Before you start, connect your game console to this TV. Read **Connect your TV > Connect devices > Game console** (Page 44).

For easy access, add the game console to the Home menu.
1. Press ⌂.
2. Select **[Add your devices]** > **[Game console]**, then press **OK**.
3. Follow the onscreen instructions to add the game console.

Game setting

You can optimise the TV display for gaming without picture lag with the **[Game]** option in the **[Smart picture]** settings.

- If you add the game console to the Home menu as **[Game console]**, the TV switches to the game setting automatically.
- If your game console is automatically added to the Home menu as a Blu-ray disc player or DVD player, set the **[Smart picture]** setting to **[Game]** before you start playing.

Switch to Game setting
1. Press ADJUST.
2. Select **[Smart picture]** > **[Game]**, then press **OK**. The TV is ready for gaming.

Note: When your gaming session ends, switch back to your usual **[Smart picture]** setting.

View Text

Select a page

While you watch channels that broadcast text, you can view the text.

1. Select a channel that broadcasts text, then press **TEXT**.
2. Select a page in one of the following ways:
   - Enter the page number with the **Numeric buttons**.
   - Press **CH +** / **CH -** to view the next or previous page.
   - Press the **Colour buttons** to select a colour coded item.
3. Press ↩ to exit.

Text options

1. While you view text, press ☐ **OPTIONS**.
2. Select an option:
   - **[Freeze page]** / **[Unfreeze page]**: Freeze or unfreeze the current page.
   - **[Dual screen]** / **[Full screen]**: Enable or disable dual screen text. Dual screen displays both the current channel and the text broadcast on two halves of the TV screen.
   - **[T.O.P. overview]**: Table Of Pages (T.O.P.) text broadcasts allow you to jump from one subject to another without entering page numbers.
   - **[Enlarge]** / **[Normal view]**: Zoom in on the page. Press the **Navigation buttons** to move around the enlarged view.
   - **[Reveal]**: Hide or reveal hidden information on a page, such as solutions to riddles or puzzles.
   - **[Cycle subpages]**: If subpages are available, each is shown automatically.
   - **[Language]**: Switch to a different language group to correctly display different character sets.
3. Press ☐ **OPTIONS** to exit.

Text language

For digital TV channels where the broadcasters provide different text languages, you can select your preferred primary and secondary languages.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]**.
3. Select **[Languages]** > **[Primary Text]** or **[Secondary Text]**.
4. Select a language, then press **OK**.

Subpages

If the text page contains several subpages, you can view each subpage in succession. These subpages are shown on a bar next to the main page number.

If subpages are available, press ◀ or ▶ to select them.

Search

You can search for a word or number that exists on the current text page.

1. While you are viewing text, press **OK** to highlight the first word or number.
2. Press the **Navigation buttons** to skip to the word or number to search.
3. Press **OK** to begin the search.
4. To exit the search, press ▲ until no word or number is highlighted.

Digital text

If a digital TV channel's broadcaster offers dedicated digital text or interactive services, you can view digital text. Such channels, such as BBC1, may have digital text with more interactive features.

Note: Digital text services are blocked when subtitles are broadcast and switched on. Read **Set up your TV > Language settings > Subtitles on digital channels** (Page 36).

When in digital text:

- Press the **Navigation buttons** to select or highlight items.
- Press the **Colour buttons** to select an option, then press **OK** to confirm or activate.

Text 2.5

With Text 2.5, you can view text with more colours and better graphics than normal text. If Text 2.5 is broadcast by a channel, it is switched on by default.

To switch Text 2.5 on or off

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]**.
3. Select **[Text 2.5]** > **[On]** or **[Off]**, then press **OK**.

Set locks and timers

Clock

You can display a clock on the TV screen. The clock displays the time that is broadcast by your TV service operator.

Display the TV clock

1. While you watch TV, press ☐ **OPTIONS**.
2. Select **[Status]**, then press **OK**.

The clock is displayed on the lower right hand corner of the TV screen.

Change the clock mode

You can change the clock mode to automatic or manual. By default, it is set to automatic mode, which synchronises it to Coordinated Universal Time (UTC). If your TV cannot receive UTC transmissions, change the clock mode to **[Manual]**.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]**.
3. Select **[Clock]** > **[Auto clock mode]**.
4. Select **[Automatic]**, **[Manual]** or **[Country dependent]**, then press **OK**.

Enable or disable daylight saving time

You can enable or disable daylight saving time depending on your region. Before you enable/disable daylight saving time, set the clock mode to **[Country dependent]**.

1. In the **[Clock]** menu, select **[Daylight saving]** > **[Daylight saving time]** or **[Standard time]**, then press **OK**. Daylight saving time is enabled or disabled.

Set the clock manually

You can set the date and time manually. Before you start, set the clock mode to **[Manual]**.

1. In the **[Clock]** menu, select **[Date]** or **[Time]**, then press **OK**.
2. Use the **Navigation buttons** to make your selection.
3. Select **[Done]**, then press **OK**.

Sleeptimer

You can switch the TV to standby after a specified time. During the countdown to the specified time, you can switch off your TV earlier or reset the sleeptimer.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Sleeptimer]**.
3. Press the **Navigation buttons** to set the sleeptimer.
The sleeptimer can be set up to 180 minutes, in steps of ten minutes. To switch off the sleeptimer, set it to zero minutes.
4. Press **OK** to activate the sleep timer.
After the specified time, the TV switches to standby.

Child lock

To protect children from unsuitable TV programmes, you can lock the TV or block age-rated programmes.

Set or change the child lock code

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]** > **[Child lock]**.
3. Select **[Set code]** or **[Change code]**.
4. Enter the code with the **Numeric buttons**.

Tip: If you forget your code, enter '8888' to override any existing codes.

Lock or unlock channels

1. In the child lock menu, select **[Channel lock]**.
2. Enter the child lock code with the **Numeric buttons**. The **[Channel lock]** menu appears.
3. Select channels to lock or unlock.

Parental rating

You can set your TV to display only programmes with age ratings lower than your child's age. This restriction only applies to digital channels from broadcasters that rate their programmes according to age.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]**.
3. Select **[Child lock]** > **[Parental rating]**.
A message prompts you to enter the child lock code.
4. Enter the child lock code with the **Numeric buttons**.
5. Select an age rating, then press **OK**.
All programmes above the selected age rating are blocked.

For information on child lock codes, see **Use more of your TV > Set locks and timers > Child lock** (Page 27).

Use EasyLink

What you can do

You can get the most out of your HDMI-CEC-compliant devices with Philips EasyLink enhanced control features. Connect your HDMI-CEC compliant devices through HDMI to your TV and control them at the same time with your TV remote control.

Note: Other brands describe HDMI-CEC functionality differently. Some examples are Anynet (Samsung), Aquos Link (Sharp) or BRAVIA Sync (Sony). Not all brands are fully compatible with Philips EasyLink.

After you have switched on Philips EasyLink, the following features are available:

One-touch play

When you play an HDMI-CEC compliant device, the TV switches on from standby and switches to the correct source.

One-touch standby

When you press ⏻ on the TV remote control, the TV and all HDMI-CEC compliant devices switch to standby mode.

EasyLink remote control

You can control multiple HDMI-CEC compliant devices with your TV remote control.

System audio control

If you connect an HDMI-CEC compliant device that includes speakers through the HDMI ARC connector, you can choose to hear the TV audio from those speakers instead of the TV speakers.

Synchronise audio

If you connect your TV to a home theatre, you can synchronise the audio and video to avoid lag between the picture and sound.

Retain picture quality

If your TV picture quality is affected by the picture-processing features of other devices, you can switch on Pixel Plus Link to retain picture quality.

Maximise display for subtitled video

Some video subtitles can create a separate subtitle bar under the video, which limits the video display area. To maximise the video display area, you can switch on auto subtitle shift and display the subtitles on top of the video image.

Listen to another device when TV is in standby

You can listen to a connected HDMI-CEC compliant device through the TV speakers, even when the TV is in standby.

What you need

- Connect at least two HDMI-CEC compliant devices through HDMI. See **Connect your TV > About cables > HDMI** (Page 40).
- Configure each HDMI-CEC compliant device properly
- Switch on EasyLink

Switch on EasyLink

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[EasyLink]**.
3. Select **[On]** or **[Off]**, then press **OK**.

Control devices simultaneously

If you connect multiple HDMI-CEC devices that support this setting, you can control all such devices through the TV remote control.

Note: This is an advanced setting. Devices that do not support this setting will not respond to the TV remote control.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[EasyLink]**.
3. Select **[EasyLink Remote Control]** > **[On]** or **[Off]**.
4. Press **OK** to activate.

Tips:

- To switch back to TV control, press ⌂, then select **[Watch TV]**.
- To control another device, press ⌂, then select the device from the Home menu.
- To exit, press ⮌.

EasyLink buttons

You can control HDMI-CEC compliant devices with the following buttons on the TV remote control:

- ⏻: Switch the TV and the connected device on or to standby.
- **Play buttons**: Control video or music play.
- **Numeric buttons**: Select a title, chapter or track.
- **OK**: Start, pause or resume play on the connected device, activate a selection, or access the device menu.
- ◀◀ / ▶▶: Search backwards and forwards on the connected device.
- ⌂: Display the TV Home menu.

You can also control devices through other EasyLink buttons that are available through the On-Screen Remote Control (OSRC).

To access the OSRC

1. While you view content from a connected device, press ☐ **OPTIONS**.
2. Select **[Show device keys]**, then press **OK**.
3. Select an onscreen button, then press **OK**.
4. Press ⮌ to exit.

Select speaker output

If a connected device is HDMI Audio Return Channel (HDMI ARC) compliant, you can output TV audio through an HDMI cable. Additional audio cables are not required. Make sure you connect the device to the HDMI ARC connector on the TV. See **Connect your TV > About cables > HDMI (Page 40).**

Configure TV speakers

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[EasyLink]** > **[TV speakers]**.
3. Select an option, then press **OK**:

- **[Off]**: Switch off TV speakers.
- **[On]**: Switch on TV speakers.
- **[EasyLink]**: Stream TV audio through the connected HDMI-CEC device. Switch the TV audio to the connected HDMI-CEC audio device through the Adjust menu.
- **[EasyLink autostart]**: Turn off TV speakers automatically and stream TV audio to the connected HDMI-CEC audio device.

Select speaker output with the adjust menu

If **[EasyLink]** or **[EasyLink autostart]** are selected, you can access the Adjust menu to switch the TV audio.

1. While you watch TV, press **ADJUST**.
2. Select **[Speakers]**, then press **OK**.
3. Select one of the following, then press **OK**:

- **[TV]**: On by default. Stream TV audio through TV and the connected HDMI-CEC audio device until the connected device switches to system audio control. TV audio is then streamed through the connected device.
- **[Amplifier]**: Stream audio through the connected HDMI-CEC device. If system audio mode is not enabled on the device, audio continues to stream from the TV speakers. If **[EasyLink autostart]** was selected, the TV prompts the connected device to switch to system audio mode.

Synchronise audio

If your TV is connected to a home theatre system (HTS) and there is a lag between the picture and the sound, you can synchronise them.

- If you are using a Philips HTS, the audio and video are automatically synchronised.
- For other HTS brands, you need to switch on the audio sync delay on the TV to synchronise the audio and video.

Switch on Audio Out Delay

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]**.
3. Select **[Audio Out delay]** > **[On]**, then press **OK**.

Retain picture quality

If your TV picture quality is affected by the picture-processing features of other devices, you can switch on Pixel Plus Link.

Switch on Pixel Plus Link

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[EasyLink]**.
3. Select **[Pixel Plus link]** > **[On]**, then press **OK**.

Maximise video display

Some subtitles create a separate subtitle bar under the video, which limits the video display area. To maximise the video display area, you can switch on auto subtitle shift. The subtitles are then displayed over the video image.

Switch on auto subtitle shift

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[EasyLink]** > **[Auto subtitle shift]**.
3. Select **[On]**, then press **OK** to activate.

Note: Make sure that the picture format of the TV is set to **[Auto format]** or **[Movie expand 16:9]**.

Listen to another device while TV is in standby

You can listen to a connected HDMI-CEC compliant device through the TV speakers, even while the TV is in standby.

1. Press **ADJUST** to receive audio from the connected Philips EasyLink device.
If available, audio only mode is switched on.
2. Accept the prompt on the TV to turn off the TV screen.
3. Control the audio playback with the TV remote control.

View Scenea

What you can do

With Scenea, you can display a picture as the wallpaper on your TV. Display the default picture or load your own picture as the wallpaper.

The wallpaper is displayed for 240 minutes or for the duration of the sleeptimer.

Switch on

1. Press .
2. Select **[Scenea]**, then press **OK**.
The default picture is displayed.

Note: The wallpaper is displayed for 240 minutes or for the duration of the sleeptimer. For information about the sleeptimer, see **Use more of your TV > Set locks and timers > Sleeptimer** (Page 27).

Load TV wallpaper

You can also load your own picture from a connected USB storage device or a connected PC as the wallpaper.

Note: When you load a new picture, it overrides the existing picture.

1. Connect the USB storage device to the TV or connect to the network.
2. Press .
3. Select **[Browse USB]** or **[Your network]**, then press **OK**.
4. Select a picture, then press **OPTIONS**.
5. Select **[Set as Scenea]**, then press **OK**.
6. Select **[Yes]**, then press **OK**.
7. Press any button to exit Scenea.

4 Set up your TV

Picture and sound

Settings assistant

You can select picture and sound settings with the help of the settings assistant, which demonstrates the effect of your chosen setting immediately.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Quick picture and sound settings]**, then press **OK**.
3. Select **[Start]**, then press **OK**.
4. Follow the onscreen instructions to choose your preferred settings.

More picture settings

You can change the settings in the Picture menu.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Picture]**, then press **OK**.
3. Select a setting to adjust, then press **OK**.

Note: Options marked with a * are available for certain models only.

- **[Smart picture]**: Access predefined smart picture settings.
- **[Reset]**: Reset to default factory settings.
- **[Backlight contrast]**: Adjust the contrast of the TV backlight.
- **[Brightness]**: Adjust the intensity and details of the dark areas.
- **[Colour]**: Adjust the level of colour saturation.
- **[Hue]**: Compensate colour variations in NTSC transmissions.
- **[Sharpness]**: Adjust sharpness in the image.
- **[Noise reduction]**: Filter and reduce noise in the image.
- **[Tint]**: Adjust the colour balance in the image.
- **[Custom tint]**: Customise tint setting.
- **[Pixel Plus HD]** / **[Pixel Precise HD]***: Control advanced settings to fine-tune each pixel to match surrounding pixels. This setting produces a brilliant, high-definition image.
  - **[HD Natural Motion]**: Available on certain models. Reduce motion judder and reproduce smooth motion.
  - **[Clear LCD]***: Enable superior motion sharpness, better black level, high contrast with a flicker-free, quiet image and a larger viewing angle.
  - **[Super resolution]**: Enable superior sharpness, especially on lines and contours in the picture.
  - **[Dynamic contrast]**: Set the level at which the TV automatically enhances details in the dark, middle and light areas of the picture.
  - **[Dynamic backlight]**: Reduce power consumption by dimming the TV backlight to match room lighting conditions.
  - **[MPEG artefact reduction]**: Smooth the digital transitions in the picture.
  - [Colour enhancement]: Set the colours to be more vivid and improve the resolution of details in bright colours.
  - **[Gamma]**: Non-linear setting for picture luminance and contrast.
  - **[Video contrast]**: Change the intensity of the bright areas, keeping dark areas unchanged.
- **[PC mode]**: Allow picture settings to be changed when a PC is connected to the TV through HDMI.
  If enabled, you can select **[Picture format]** > **[Unscaled]** which provides maximum detail for display of PC content.
- **[Light sensor]**: Adjust settings dynamically to match lighting conditions.
- **[Picture format]**: Change the picture format.
- **[Screen edges]**: Change the picture size.

English

- **[Picture shift]**: Move the position of the picture. You cannot select this setting if the selected picture format is **[Auto fill]**, **[Auto zoom]** or **[Wide screen]**.

More sound settings

You can change the settings in the Sound menu.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Sound]**, then press **OK**.
3. Select a setting to adjust:

- **[Smart sound]**: Access predefined smart sound settings.
- **[Reset]**: Reset to factory default settings.
- **[Bass]**: Adjust the bass level.
- **[Treble]**: Adjust the treble level.
- **[Surround]**: Enable spatial sound.
- **[Headphones volume]**: Adjust headphone volume.
- **[Auto volume leveling]**: Automatically reduce sudden volume changes, for example when switching channels.
- **[Balance]**: Adjust the balance of the left and right speakers.
- **[Digital output format]**: Select the type of audio output through the digital audio output connector. Select **[Stereo]** for stereo sound or **[Multichannel]** to output audio to home theatre

Select audio format

If a digital TV channel broadcaster streams audio in several formats, you can select an audio format.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]** > **[Languages]**.
3. Select a setting, then press **OK**.

- **[Preferred audio format]**: Receive standard audio format (MPEG) or advanced audio formats (AAC, EAC-3 or AC-3 if available).
- **[Mono/Stereo]**: If stereo broadcasting is available, select mono or stereo audio.

Reset picture and sound

You can restore the default picture and sound settings, while the channel installation settings remain the same.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Factory settings]**, then press **OK**.

All TV settings (except for channel settings) are reset to the default factory settings.

Channel settings

Automatic install

When the TV was switched on for the first time, a full installation of channels was performed. To change your language, country and reinstall all available TV channels, you can run this full installation again.

Start installation

1. Press ⌂.
2. Select **[Setup]** > **[Search for channels]** > **[Reinstall channels]**, then press **OK**.

The country menu is displayed.

3. Select your country, then press **OK**.
4. Select your network, then press **OK**:

- **[Antenna (DVB-T)]**: Access free-to-air antenna or digital DVB-T channels.
- **[Cable (DVB-C)]**: Access cable or digital DVB-C channels.

5. Follow the onscreen instructions to select other options, if any.

The start menu for channel search is displayed.

6. Start channel search:

- If your channel broadcaster has instructed you to change settings, select **[Settings]**, then press **OK**. Follow the broadcaster's instructions to update the settings.
- Otherwise, select **[Start]**, then press **OK**.

7. Once the channel search is complete, select **[Finish]**, then press **OK**.
8. Once the channel search is complete, select **[Finish]**, then press **OK**.

Tip: Press ☰ **LIST** to see the channel list.

Note: When digital TV channels are found, the list of installed channels may display empty channel numbers. You can rename, reorder or uninstall these channels.

Install analogue channels

You can search and store analogue TV channels one-by-one.

Step 1: Select your system

Note: Skip this step if your system settings are correct.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Analogue: Manual installation]** > **[System]**, then press **OK**.
4. Select the system for your country or region, then press **OK**.

Step 2: Search and store new TV channels

1. In the **[Analogue: Manual installation]** menu, select **[Search channel]**, then press **OK**.
2. Find the channel:
   - If you know the channel frequency, enter it with the **Navigation buttons** or **Numeric buttons**.
   - If you do not know the channel frequency, search for the next frequency that has a strong signal: Select **[Search]**, then press **OK**.
3. After you have found the correct channel, select **[Done]**, then press **OK**.
4. Select **[Store as new channel]**, then press **OK** to store the new TV channel.

Note: If the reception is poor, reposition your antenna and repeat the procedure.

Install digital channels

If you know the channel frequency of the channels you want to install, you can search and store digital channels one-by-one. For best results, contact the broadcaster or a professional installer.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Digital: Reception test]** > **[Search]**, then press **OK**.
4. Press the **Numeric buttons** to enter the channel frequency.
5. Select **[Search]**, then press **OK**.
6. When the channel is found, select **[Store]**, then press **OK**.
7. Press ⮌ to exit.

Note: If your cable provider does not provide you with a specific symbol rate value for DVB-C channels, select **[Automatic]** in **[Symbol rate mode]**.

Fine-tune analogue channels

If the reception of an analogue TV channel is poor, you can fine-tune the TV channel.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Analogue: Manual installation]** > **[Fine tune]**, and then press **OK**.
4. Press ▲ or ▼ to fine-tune the channel.
5. When you have selected the correct channel frequency, select **[Done]**, and then press **OK**.
6. Select an option, then press **OK**.
   - **[Store current channel]**: Store the channel as the current channel number.
   - **[Store as new channel]**: Store the channel as a new channel number.

Update channel list

When the TV was switched on for the first time, a full installation of channels was performed.

By default, when there are changes to these channel lists, the TV updates them automatically. You can also switch off the automatic update or manually update the channels.

Note: If you are prompted to enter a code, enter '8888'.

Automatic update

To add or remove digital channels automatically, leave the TV in standby mode. The TV updates channels and stores new channels every day. Empty channels are removed from the channel list.

Switch off the channel update message

If a channel update is performed, a message is displayed at startup. You can switch off this message.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]**.
3. Select **[Channel installation]** > **[Channel update message]**.
4. Select **[Off]**, then press **OK**.

Switch off automatic updates

In the **[Channel installation]** menu, select **[Automatic channel update]** > **[Off]**.

Update channels manually

1. Press ⌂.
2. Select **[Setup]** > **[Search for channels]** > **[Update channels]**, then press **OK**.
3. Follow the onscreen instructions to update the channels.

Copy channels

ATTENTION: This feature is intended for dealers and service personnel.

You can copy channel lists from one Philips TV to another through a USB storage device. You do not need to search for channels or install them again on the second TV. The channel list file is small enough to fit on any USB storage device.

What you need

Two Philips TVs that have these properties:

- The same country setting
- The same year range
- The same DVB type, as indicated by the suffix (H, K, T, or D/00) in the model name
- The same settings for satellite channels, including the number of LNB satellites
- The same hardware type, as indicated by the sticker on the back of the TV (for example Qxxx.xx.Lx)
- Compatible software versions

If the channel list cannot be copied to the second TV, a message is displayed.

Note: If you are prompted to enter a code, enter '8888'.

Step 1: Check the country setting

1. Switch on the first TV (with the channels that you want to copy to the second TV).
2. Press ⌂.
3. Select **[Setup]** > **[Search for channels]** > **[Reinstall channels]**, then press **OK**.
The country menu is displayed.
4. Make a note of the current setting.
5. Press ⮌.
6. Press **[Cancel]** to exit.

Step 2: Copy channel list to USB

1. Connect a USB storage device to the first TV (with the channels installed on it).
2. Press ⌂.
3. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Channel list copy]** > **[Copy to USB]**, then press **OK**.
The channel list is copied to the USB storage device.
4. Disconnect the USB storage device.

Step 3: If the second TV has no channels installed

1. Switch on the second TV (on which you want to copy the channel list).
Initial installation starts.
2. Follow the onscreen instructions and select the same country as the TV whose channel list you want to copy.
3. Skip the search for channels.
4. Connect the USB storage device.
5. Press ⌂.
6. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Channel list copy]** > **[Copy to TV]**, then press **OK**.
The channel list is copied to the TV storage device.
7. Disconnect the USB storage device.

Step 3: If the second TV has no channels installed

1. Switch on the second TV (on which you want to copy the channel list).
2. Press ⌂.
3. Select **[Setup]** > **[Search for channels]** > **[Reinstall channels]**, then press **OK**.
The country menu is displayed.
4. Make sure that the country setting is the same as for the first TV.
5. Press ⮌.
6. Press **[Cancel]** to exit.

7. If the country setting is different, reinstall the second TV to match the country setting of the first TV. See **Set up your TV > Restore default settings** (Page 39).
8. Connect the USB storage device to the second TV.
9. Press ⌂.
10. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Channel list copy]** > **[Copy to TV]**, then press **OK**.
The channel list is copied to the second TV.
11. Disconnect the USB storage device.

Satellite settings

What you can do

View satellite channels

Note: Available on certain models only. **[Search for satellite]** is only available if the TV supports DVB-S.
To receive satellite channels, connect the SAT connector on your TV to a satellite dish antenna.

LNBs

This TV can receive signals from 4 different low noise block-down converters (LNBs). An LNB is mounted at the end pole of the dish antenna and captures signals from a satellite.

Install satellite channels

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Search for satellite]** > **[Reinstall channels]**.
3. Follow the onscreen instructions to complete the installation.
4. Once complete, select **[Finish]**, then press **OK**.

Select connection type

While you install satellite channels, you need to set the connection type. The connection type determines the number of LNBs on your dish antenna and the number of satellite channels you can install.
1. After you select **[Reinstall channels]**, select **[Settings]** and then press **OK**.
2. Select **[Connection type]**.
3. Select a setting, then press **OK**.
- **[One LNB]**: Select if you have only one LNB.
- **[DiSeqC Mini (2 LNBs)]**: Select if you have 2 LNBs.
- **[DiSeqC 1.0 (3-4 LNBs)]**: Select for 3 or 4 LNBs.

Test signal strength

If a channel or transponder is skipped during installation, you can test the signal strength of a satellite or add a new channel.
1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Search for satellite]** > **[Satellite reception test]**, then press **OK**.
3. Select the LNB.
4. If you know the frequency of the transponder (which can include several channels), select **[Frequency]** and enter it.
5. Select **[Search]**, then press **OK**.
6. If a new frequency is found, press **[Store]**to add the new transponder with its channels.

Update satellite channels

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Search for satellite]** > **[Update channels]**.
3. Follow the onscreen instructions to complete the installation.
4. Once complete, select **[Finish]**, then press **OK**.

Add and remove satellites

You can add or remove satellites at any time, and install channels from new satellites.

Note: Before you add satellites, make sure that the connection type is correct. See **Set up your TV > Satellite Settings > Install satellite channels** (Page 35).

1. Press ⌂ > **[Setup]** > **[Search for satellite]**, and press **OK**.
2. Select **[Add satellite]**, then press **OK**.
The TV searches for a satellite on the first free LNB. This can take several minutes. If no satellite is found, check the antenna connections and the position of the dish antenna.

3. If no satellite is found, select **[Search]** to scan again or **[Next LNB]** to skip to the next LNB.

- If there are no free LNBs available, remove a satellite first.
- If you are satisfied with the added satellite, install the channels.

4. To install all channels, select **[Install]**. The installation can take several minutes.

Remove a satellite

1. Press ⌂ > **[Setup]** > **[Search for satellite]**.
2. Select **[Remove satellite]**, then press **OK**.
3. Select the satellite you want to remove and press **OK**.

The satellite and its channels are removed from the installation.

Language settings

Menu language

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]** > **[Menu language]**.
3. Select a menu language from the list, then press **OK**.

Audio language

If the TV channel broadcasts multiple audio languages, you can select the preferred audio language.

1. While you watch TV, press ☐ **OPTIONS**.
2. Select an option, then press **OK**.

- **[Audio language]**: Select the audio language for digital channels.
- **[Dual I-II]**: Select the audio language for analogue channels.

Audio languages for digital channels

For digital channels with multiple audio languages, you can select the default audio language that is broadcast.

1. Press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]** > **[Language]**.
3. Select a setting, then press **OK**.

- **[Primary audio]**: If this language is broadcast, it is selected by default.
- **[Secondary audio]**: If the primary audio language is not broadcast, select this language.

Subtitles on analogue channels

1. While you watch an analogue TV channel, press **TEXT**.
2. Enter the three-digit page number of the subtitles page (usually '888').
If available, subtitles are switched on.
3. Press ⌂ to exit text.

Subtitles on digital channels

1. While you watch a digital TV channel, press ☐ **OPTIONS**.
2. Select **[Subtitles]**, then press **OK**.
3. Select **[Subtitles off]**, **[Subtitles on]** or **[On during mute]**, then press **OK**.

If you select **[On during mute]**, subtitles are displayed only when you press 🔇 to mute the sound.

Note: If an MHEG application is activated, subtitles are not displayed.

Subtitle language

For certain digital channels, you can change the subtitle language.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Channel settings]** or **[Satellite settings]** > **[Subtitle language]**.
3. Select **[Primary subtitles]** or **[Secondary subtitles]** for the preferred language.
4. Press **OK** to confirm.

Tip: Press ☐ **OPTIONS** > **[Subtitle language]** to change the subtitle language for a specific channel.

Universal access settings

Switch on

Some digital TV broadcasters provide special audio and subtitle features for people who are hearing or visually impaired. You can switch these features on or off.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]**.
3. Select **[Universal access]** > **[On]** or **[Off]**, then press **OK**.

Hearing impaired access

Tip: To make sure that a hearing impaired audio language is available, press ☐ **OPTIONS**, then select **[Audio language]**. Languages with an ear icon support hearing impaired audio.

To switch on hearing impaired audio and subtitles

1. While you watch TV, press ☐ **OPTIONS**.
2. Select **[Universal access]** >**[Hearing impaired]**.
3. Press a button to select an option:
- **Red button**: Switch off hearing impaired features.
- **Green button**: Switch on hearing impaired audio and subtitles.

4. Press ↩ to exit.

Visually impaired access

Tip: To make sure that a visually impaired audio language is available, press ☐ **OPTIONS**, then select **[Audio language]**. Languages with an eye icon support visually impaired audio.

To switch on visually impaired audio

1. While you watch TV, press ☐ **OPTIONS**.
2. Select **[Universal access]**.
3. Press the **Green button** to select **[Visually impaired]**.
4. Press a button to select an option:
- **Red button** - **[Off]**: Switch off visually impaired audio.
- **Yellow button** - **[Headphones]**: Hear visually impaired audio from headphones only. (if applicable)
- **Green button** - **[Speakers]**: Hear visually impaired audio from speakers only.
- **Blue button** - **[Speakers + headphones]**: Hear visually impaired audio from speakers and headphones.

5. Press ↩ to exit.

Note: If the EasyLink remote control is switched on, you cannot select the **Green button**or the **Yellow button**. To switch off EasyLink, see **Use more of your TV > Use EasyLink > What you need** (Page 28).

Change volume for visually impaired audio

1. In the **[Universal access]** menu, press the **Yellow button** to select **[Mixed volume]**.
2. Press the **Navigation buttons** to change the volume, then press **OK**.
3. Press ↩ to exit.

Audio feedback for the visually impaired

When you press a button on the remote control or TV, you can set the TV to play a beep.

1. In the **[Universal access]** menu, press the **Blue button** to select **[Key beep]**.
2. Press the **Green button** to turn on audio feedback or press the **Red button** to turn it off.
3. Press ↩ to exit.

Other settings

TV demo

You can start a demo to find out more about the features on this TV.

Note: Demos are not supported on MHEG channels.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[Watch demos]**, then press **OK**.
3. Select a demo, then press **OK**.
4. Press ↩ to exit.

Location

To make sure that the correct TV settings are applied, you can select where the TV is used.

Shop or home mode

Select **[Home]** mode to access all TV settings. In **[Shop]** mode, you can access only limited settings.

1. While you watch TV, press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Preferences]**.

3. Select **[Location]** > **[Home]** or **[Shop]**, then press **OK**.
4. Restart the TV.

Placement

- Before you position the TV, read all safety precautions. See **Get Started > Important > Safety** (Page 5).
- Position the TV where light does not shine directly on the screen.
- The ideal viewing distance of this TV is three times its diagonal screen size. For example, if the diagonal screen size of the TV is 81cm / 32", the ideal viewing distance is ~3.5m / ~138" from the front of the screen.
- While seated, your eyes should be level with the centre of the screen.

Stand mount or wall mount

You can apply the best settings for your TV by selecting wall mount or stand mount.

1. In the **[Preferences]** menu, select **[TV placement]**.
2. Select **[On a TV stand]** or **[Wall mounted]**, then press **OK**.

Update software

Check version

1. Press ⌂.
2. Select **[Setup]** > **[Software settings]** > **[Current software info]**, then press **OK**.

The version of the current software is displayed.

Caution: Do not install a lower version of software than the current version installed on your product. Philips cannot be held liable or be made responsible for problems caused by a software downgrade.

Update the software through one of these methods:

- update with USB storage device
- update from digital broadcast
- update from the Internet

Update with USB

Before you update the software, make sure that you have:

- A USB storage device that has at least 256 megabytes of storage space, is FAT or DOS formatted and has its write protection disabled.
- Access to a computer with a USB connector and Internet access.

Note: Do not use a USB hard drive.

1. Press ⌂.
2. Select **[Setup]** > **[Update software]**, then press **OK**.
3. Select **[USB]**, then press **OK**.
4. Follow the onscreen instructions to start the update.

Note: The update assistant directs you to the Philips support website. See the installation instructions on the website to complete the update.

Update from digital broadcast

When available, the TV can receive software updates through digital broadcasts. When a software update is received, you are prompted to update the software. We strongly recommend that you update the software when prompted.

Follow the onscreen instructions.

Note: To update the software later, select ⌂ > **[Setup]** > **[Software settings]** > **[Local updates]**.

From the Internet

You can update the TV software directly from the Internet by connecting the TV to the Internet. See **Connect your TV > Network and the Internet** (Page 50).

1. Press ⌂ > **[Setup]** > **[Update software]**, then press **OK**.
2. Select **[Internet]**, then press **OK**.
3. Follow the onscreen instructions to start the update.

When the update is complete, the TV switches to standby and on again automatically. Wait for the TV to switch back on. Do not switch the TV on yourself.

Note: If the TV is connected to the Internet, the TV displays the availability of new software at startup.

Restore default settings

You can reset all picture and sound settings and reinstall all TV channels on your TV.

1. Press ⌂.
2. Select **[Setup]** > **[TV settings]** > **[Reinstall TV]**, then press **OK**.
3. Follow the onscreen instructions.

5 Connect your TV

About cables

Cable quality

Overview

Before you connect devices to the TV, check the available connectors on the device. Connect the device to the TV with the highest quality connection available. Good quality connectors transfer picture and sound better.

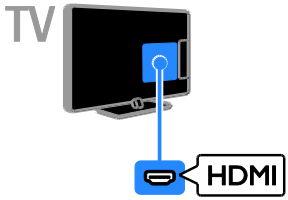
The connections shown in this user manual are recommendations only. Other solutions are possible.

Tip: If your device has only composite or RCA connectors, use a composite (CVBS) cable to connect the device to the Y Pb Pr connector on the TV.

HDMI

An HDMI connection has the best picture and sound quality.

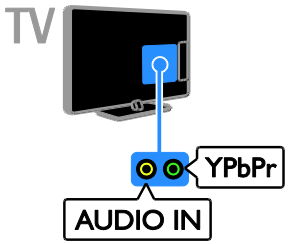
- An HDMI cable combines video and audio signals. Connect HDMI for high-definition (HD) TV signals and to switch on EasyLink.
- An HDMI Audio Return Channel (ARC) connector allows output of TV audio to an HDMI ARC compliant device.
- Connect HDMI cables shorter than 5 meters/16.4 feet.



Y Pb Pr

Component video (Y Pb Pr) only transmits video. For sound, also connect to AUDIO IN. Use the supplied Y Pb Pr adapter cable to connect devices.

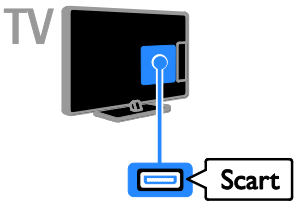
The Y Pb Pr connection can handle high-definition (HD) TV signals.



SCART

A SCART connection combines video and audio signals. Use the supplied SCART adapter cable to connect devices.

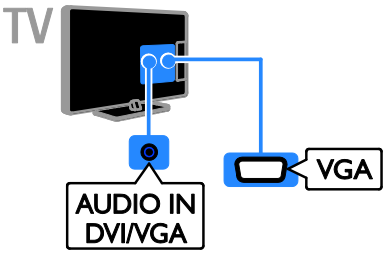
SCART connectors can handle RGB video signals but cannot handle high-definition (HD) TV signals.



VGA

You can connect VGA to display PC content on the TV.

VGA only transmits video. For sound, also connect to AUDIO IN.

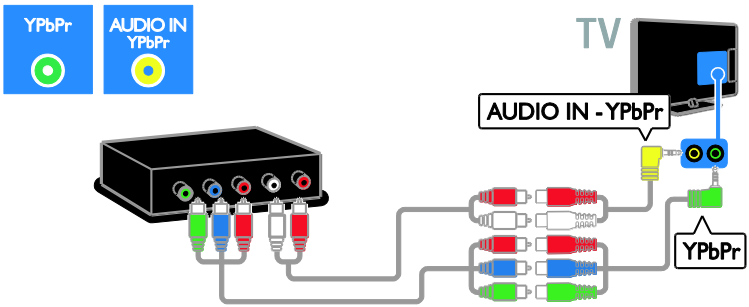


Connect devices

Blu-ray or DVD disc player

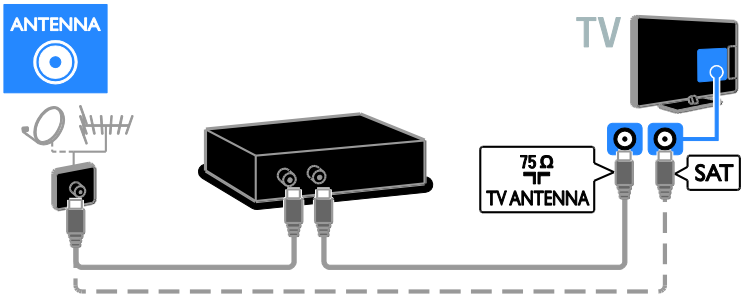
Connect the disc player to the TV with an HDMI cable.

Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the disc player to the TV.



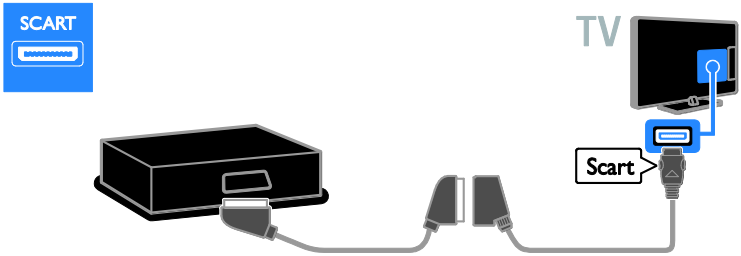
TV receiver

Connect the satellite or digital TV receiver to the TV with an antenna cable. (SAT is available on certain models only.)

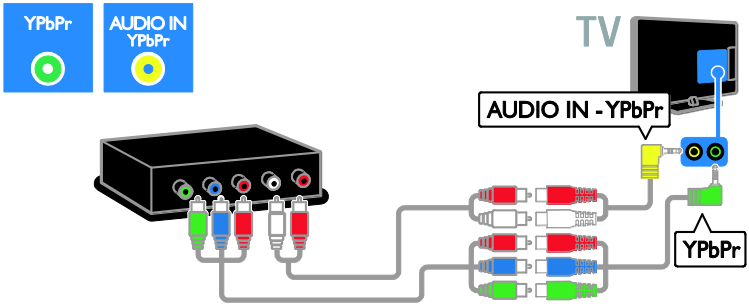


Connect the satellite or digital TV receiver to the TV with an HDMI cable.

Use the supplied adapter cable with a SCART cable to connect the satellite or digital TV receiver to the TV.

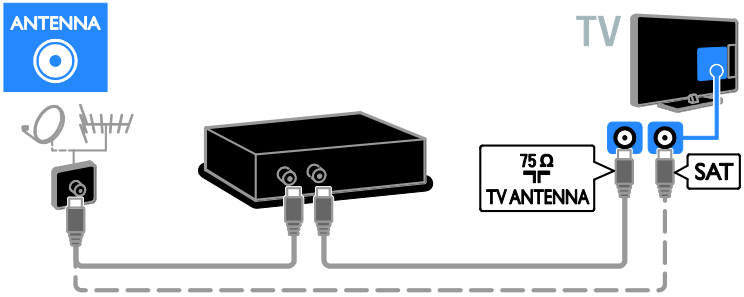


Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the receiver to the TV.

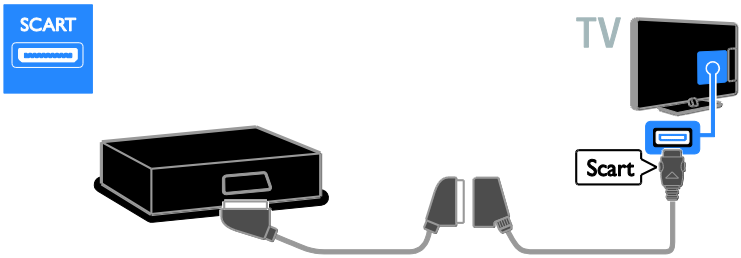


Video recorder

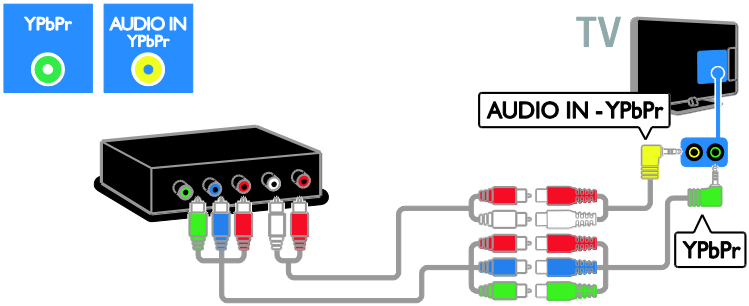
Connect the recorder to the TV with an antenna cable. (SAT is available on certain models only.)



Use the supplied adapter cable with a SCART cable to connect the recorder to the TV.



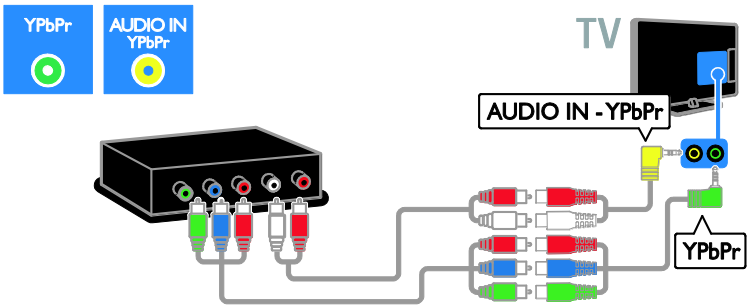
Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the receiver to the TV.



Game console

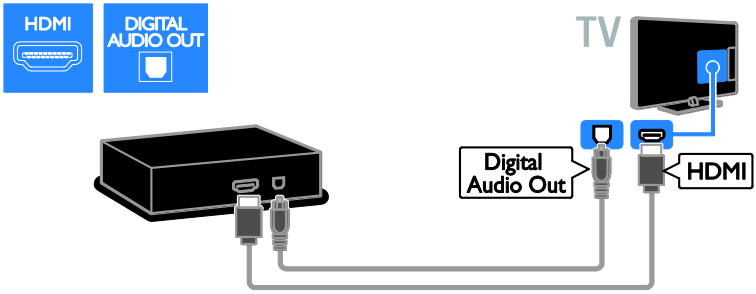
Connect the game console to the TV with an HDMI cable.

Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the game console to the TV.

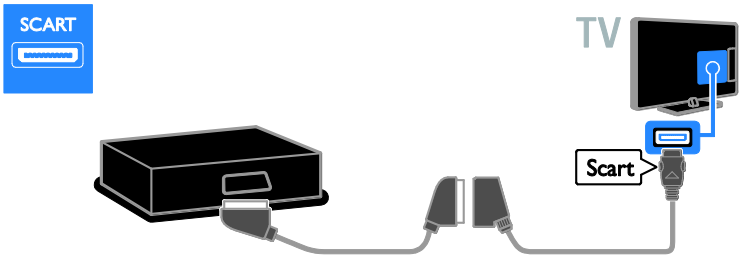


Home theatre

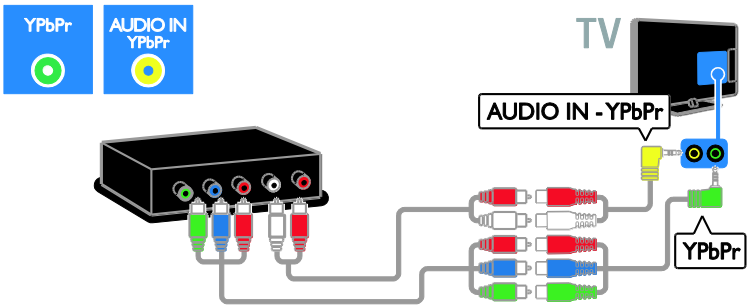
Connect the home theatre to the TV with an HDMI cable and an optical cable.



Use the supplied adapter cable with a SCART cable to connect the home theatre to the TV.

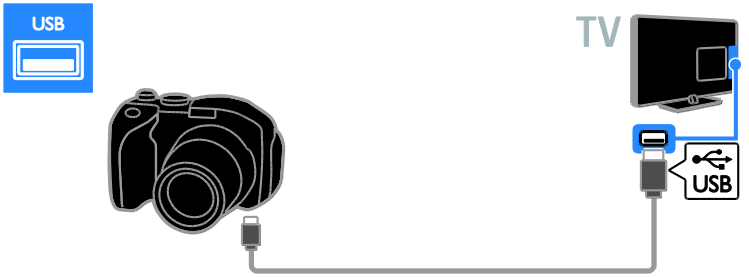


Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the home theatre to the TV.



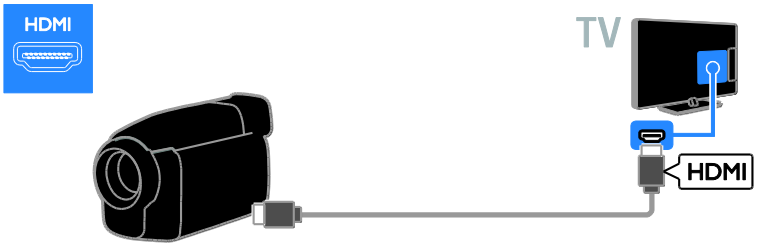
Digital camera

Connect the digital camera to the TV with a USB cable.

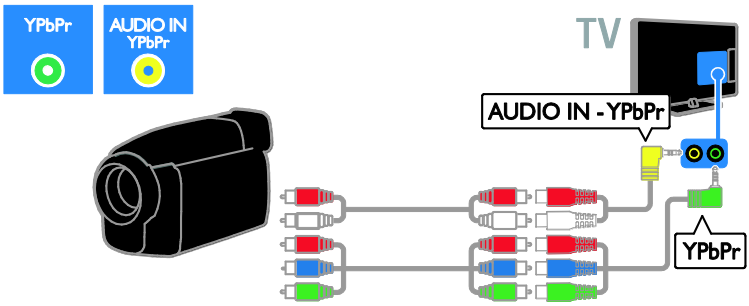


Digital camcorder

Connect the digital camcorder to the TV with an HDMI cable.



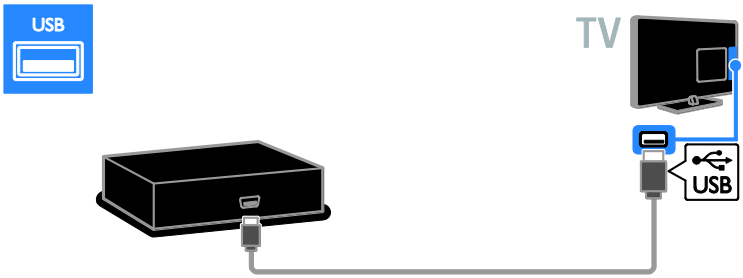
Use the supplied adapter cables with a component video (Y Pb Pr) cable and an audio (L/R) cable to connect the camcorder to the TV.



Connect more devices

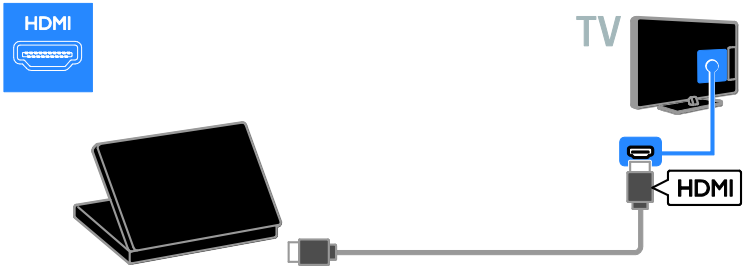
USB hard drive

Connect the USB hard drive to the TV with a USB cable.

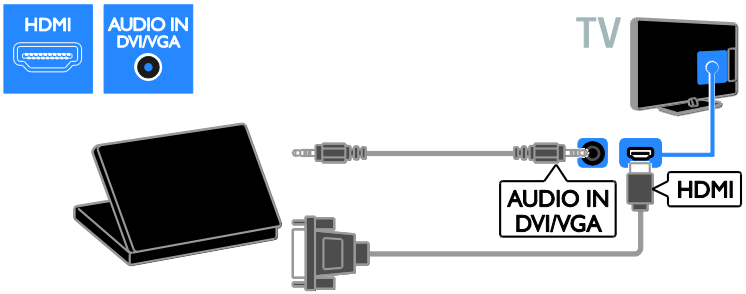


Computer

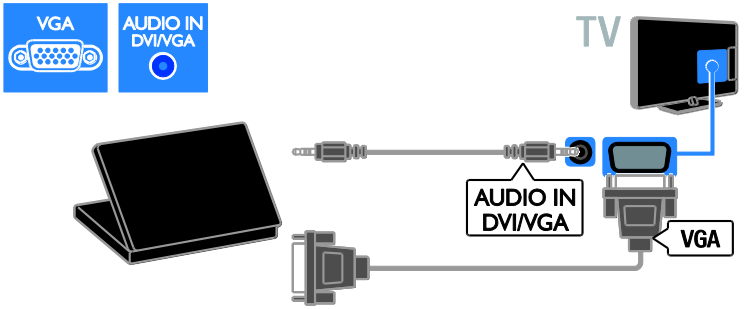
Connect the computer to the TV with an HDMI cable.



Connect the computer to the TV with a DVI-HDMI cable and an audio cable.



Connect the computer to the TV with a VGA cable and an audio cable.



Keyboard and mouse

USB keyboard

You can connect a USB keyboard to enter text such as device names on the TV. You can also type in channel names or subject names in Smart TV apps such as YouTube.

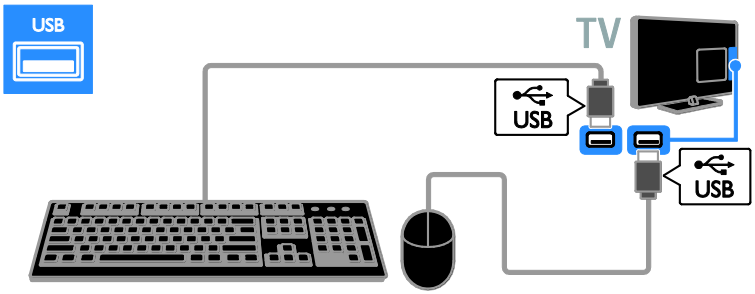
USB mouse

You can connect a USB mouse to navigate pages on the Internet and click on links easily.

Note:

- If you need extra USB connectors, use a USB hub. You can also connect the USB mouse to a connected USB keyboard.
- You can also connect the USB mouse to a connected USB keyboard.

Connect the keyboard and mouse to the TV with a USB cable.



When the TV detects the keyboard, you can select the keyboard layout and test your selection. If you have selected a Cyrillic or Greek keyboard layout first, you can also select a secondary Latin keyboard layout.

To change the keyboard layout, press ⌂ > **[Setup]** > **[TV settings]** > **[Preferences]** > **[USB mouse/keyboard]** > **[Keyboard settings]** and press **OK**.

TV keys on your keyboard

To make a text entry, use the following keys:

- **Enter**↵ : confirm an entry
- **Backspace**← : delete a character before the cursor
- **Navigation keys**: navigate within a text field
- **Alt** + **Shift**: switch between keyboard layouts if multiple keyboard layouts are set

Smart TV keys on your keyboard

- **Enter**↵ : confirm an entry
- **Backspace**←: return to the previous page
- **Navigation keys**: navigate to the next field
- **Tab**: **Next**
- **Tab** and **Shift**: **Previous**
- **Home**: scroll to the top of the page
- **End**: scroll to the bottom of the page
- **Page Up**: jump up one page
- **Page Down**: jump down one page
- **+/-** : zoom in or out one step
- * : fit to width

When the TV detects the mouse, set the tracking speed. Navigate into the test area to check the speed.

Use the USB mouse with your TV

- Left mouse button (left-click):**OK**
- Right mouse button (right-click): ⮌ (**Back**)
- Scroll wheel: to scroll up and down an Internet page.

Note:

The USB mouse cannot navigate in Smart TV apps or the TV menus.

Watch a connected device

Add new device

You can watch a connected device in one of the following ways:

- Add its icon to the Home menu for easy access.
- Select from the Source menu.

Note: If you connect an HDMI-CEC compliant device to the TV through the HDMI connector and switch it on, the device is automatically added to the Home menu.

Add new device

1. Connect and switch on the device.
2. Press ⌂.
3. Select **[Add your devices]**, then press **OK**.

4. Follow the onscreen instructions.
If you are prompted to select the TV connection, select the connector that this device uses.

Rename device

After you have added a new device to the Home menu, you can rename it.
1. Press ⌂.
2. Select the device icon from the Home menu.
3. Press ▭ **OPTIONS**.
4. Select **[Rename]**, then press **OK**.
A text input box appears.
5. Press the **Numeric buttons** and the **Navigation buttons** to select and enter the name.
6. When complete, select **[Done]**, then press **OK**.

Select a source

From Home menu

After you have added the new device to the Home menu, you can select the new device icon to view its contents.
1. Press ⌂.
2. Select the device icon from the Home menu.
3. Press **OK** to confirm.

From Source menu

You can also press ⇥ **SOURCE** to display a list of connector names. Select the connector that connects the device to the TV.
1. Press ⇥ **SOURCE**.
2. Press the **Navigation buttons** to select a connector in the list.
3. Press **OK** to confirm.

Remove device

If the device is no longer connected to the TV, you can remove it from the Home menu.
1. Press ⌂.
2. Select the device icon from the Home menu.
3. Press ▭ **OPTIONS**.
4. Select **[Remove this device]**, then press **OK**.
The selected device is removed from the Home menu.

Network and the Internet

What you can do

View Media

If you connect the TV to a home network, you can play photos, music and videos from your computer. See **Use your TV > View Media** (Page 15).

Smart TV

If you connect the TV to a home network with an Internet connection, you can browse Smart TV. Smart TV offers Internet services and websites tailored to your TV. Play music and videos, consult infotainment, rent movies and much more. See **Use your TV > Browse Smart TV** (Page 17).

Interactive TV

If you connect the TV to the Internet, you can enjoy the full benefits of Interactive TV. Systems such as HbbTV, MHP and DTVi, use the Internet to communicate with the TV. The availability of these systems depends on your local broadcaster.

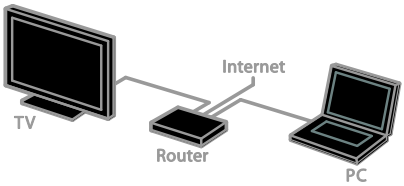
What you need

Warning: This TV complies with the EMC directive only when you use a shielded Cat5 Ethernet cable.

- An Ethernet cable that is shorter than 3 metres.
- A computer network that includes:
  a) A universal plug-and-play (UPnP) router and
  b) A computer with one of the following operating systems: Microsoft Windows XP, Microsoft Windows Vista, Mac OS X or Linux.
- To connect your TV to computers, you also need media server software that is set to share files with your TV. See **Use your TV > View media** (Page 15).

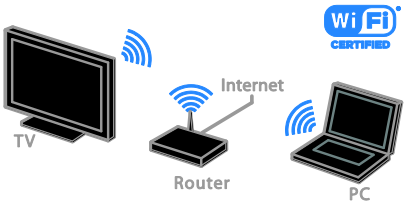
- To connect your TV to the Internet, you also need a high-speed connection to the Internet.

Connect



You can connect this TV to your home network through a wired or wireless connection.

- For a wired connection, see **Connect your TV > Network and the Internet > Wired connection** (Page 51).



- For a Wi-Fi ready connection, see **Connect your TV > Network and the Internet > Wi-Fi ready** (Page 51).

Wired connection

1. Switch on the router and switch on its DHCP setting.
2. Connect the router with an Ethernet cable to the TV.
3. Press ⌂, then select **[Setup]**.
4. Select **[Connect to network]**, then press **OK**.
5. Follow the onscreen instructions to install the network.
6. Wait for the TV to find the network connection.
7. If prompted, agree to the End User Licence Agreement.

Wi-Fi ready

This section is only for Wi-Fi ready TVs.
With the Philips wireless USB adapter PTA01 (sold separately), you can connect the TV to your home network wirelessly. You can enjoy the best of the Internet from Smart TV services and share content between your connected devices using DLNA.

Note:
The wireless network operates in the same 2.4GHz frequency spectrum as common household devices, such as Dect phones, microwave ovens or Bluetooth devices, which can cause Wi-Fi interference. Move these devices away from the TV.

- To reduce network traffic, switch off unused network equipment in the home network.
- Reception quality depends on the location of the wireless router and the local Internet service provider.
- When playing video over your wireless home network, we recommend that you use an IEEE 802.11 N router. The connection speed may differ according to the operating environment of your wireless home network.

Start wireless setup
1. Switch on your wireless network router.
2. Connect the Philips USB adapter PTA01 to a USB connector on the TV.
The wireless installation starts automatically.
3. Follow the onscreen instructions.

Tip: Keep the wireless USB adapter connected to the TV.

WPS - Wi-Fi Protected Setup
1. If your router supports WPS (WiFi Protected Setup), press the WPS button on the router.
2. After 2 minutes, select **[WPS]** on the TV, then press **OK**.
The TV connects to your network. This takes about 2 minutes.

Most new wireless routers have the WPS system and carry the WPS logo. The WPS system uses WPS security encryption and cannot be combined with devices on your network that use the WEP (Wired Equivalent Privacy) security encryption.

If you still need the WEP devices in your network, install with **[Scan]** > **[Custom]**.

Scan for routers

If you have several routers in your network, you can select the network you need.
1. To select a specific network router, press **[Scan]** on the first page of the installation. The routers with WPS and the strongest signal are shown first in the list on screen.

2. Select the router you need, then press **OK**.

- If you are connecting to a WPS router, select **[WPS]** on the TV.
- If you want to set the PIN code in your router software to connect, select **[WPS pin]** and note down the code.
- To enter the encryption key manually, select **[Standard]** and enter the key when prompted.

Set secured connection with WPS encryption

1. To set the secured connection with a PIN code, select the **[WPS pin]** and press **OK**.
2. Write down the 8-digit PIN code shown on TV and enter it in the router software on your PC.
See the router manual for where to enter the PIN code.

Set secured connection with WPA encryption

If your router has WPA (WiFi Protected Access) security, enter the pass phrase with the remote control.
1. To enter the encryption key (the security key) manually, select **[Standard]** and press **OK**.
2. To access the onscreen keyboard, select the text entry field, then press **OK**.

Set secured connection with WEP encryption

If your router has WEP security, the TV asks for the WEP encryption key in hexadecimal numbers.
1. Locate the hexadecimal key in the router software on your PC and make a note of of the first key in the WEP keys list.

2. Enter the security key on the TV with the remote control to connect to the router.
3. If prompted, agree to the End User Licence Agreement.

TV network name

If you have more than one TV in your home network, you can rename this TV to give it a unique name.

1. Press ⌂ > **[Setup]** > **[Network settings]**, and select **[TV network name]**.
2. To enter the name, press **OK** to open the onscreen keyboard or use the remote control keypad.

Common interface

What you can do

You can watch scrambled digital TV channels with a Conditional Access Module (CAM). After the CAM is inserted and subscription fees are paid, you can watch the programme.

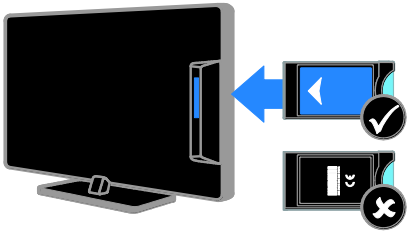
This TV supports CI as well as CI+. CI+ supports premium HD digital programmes with a high level of copy protection.

Note: The applications, functions, content and onscreen messages depend on the CAM service provider.

What you need

Caution: To protect the CAM from damage, insert the CAM as instructed.

Note: Refer to the documentation from your service operator on how to insert a smart card into the Conditional Access Module.



1. Switch off the TV.
2. Follow the directions printed on the CAM to insert the CAM into the Common Interface slot at the side of the TV.
Push the CAM in as far as it will go.
3. Switch on the TV, then wait for the CAM to be activated. This takes a few minutes.
To maintain access to encrypted digital TV channels, leave the CAM in the slot.

Watch CAM services

1. After inserting and activating the CAM, press ⊟ **OPTIONS**.
2. Select **[Common interface]**, then press **OK**.
3. Select the CAM provider, then press **OK**.

6 Troubleshooting

General issues

The TV does not switch on:

- Disconnect the power cable from the power outlet. Wait for one minute then reconnect it.
- Make sure that the power cable is securely connected.

The TV does not respond to remote control or front controls when switched on:

The TV requires some time to start up. During this time, the TV does not respond to the remote control or front controls. This is normal behaviour.

When you are turning the TV on, off or to standby, you hear a creaking sound from the TV chassis:

No action is required. The creaking sound is due to the normal expansion and contraction of the TV as it cools and warms up. This does not affect performance.

When the TV is in standby, a startup splash screen is displayed, then returns to standby mode:

This is normal behaviour. When the TV is disconnected and reconnected to the power supply, the startup screen is displayed at the next startup.

To switch on the TV from standby, press ⏻ on the remote control or press any key on the TV.

The standby light on the TV blinks red:

Disconnect the power cable from the power outlet. Wait until the TV cools down before you reconnect the power cable. If the blinking reoccurs, contact Philips Consumer Care.

You forgot the 4-digit code to unlock the channel blocking feature (child lock):

Enter '8888'.

The TV or Smart TV menu is in the wrong language:

Change the menu to your preferred language. See **Set up your TV > Language settings > Menu language** (Page 36).

You want to upgrade your TV software:

Visit **www.philips.com/support** and download the latest software package for your TV. Software installation instructions and release notes indicating what's been updated are also available at the site. Full instructions on how to upgrade your TV software are also available at **Set up your TV > Update software** (Page 38).

Channel issues

You want to install TV channels:

See **Set up your TV > Channel settings** (Page 32) for instructions on installing analogue or digital channels. If you want to install satellite TV channels, see **Set up your TV > Satellite settings** (Page 35).

No digital channels were found during the installation:

- Make sure that the TV supports DVB-T, DVB-C or DVB-S in your country.
- Make sure that all cables are properly connected and that the correct network is selected.

Previously installed channels do not appear in the channel list:

Make sure that the correct channel list is selected.

You want to rearrange or reorder the channel list:

After channels have been installed, they appear in the channel list. For information about managing channel lists, including rearranging channels, see **Watch TV > Manage channel lists** (Page 12).

Picture issues

The TV is on, but there is no picture or the picture is distorted:

- Make sure that the antenna is properly connected to the TV.

- Make sure that the correct device is selected as the display source.
- Make sure that the external device or source is properly connected.

There is sound but no picture:
Make sure that the picture settings are set correctly.

There is poor TV reception from an antenna connection:
- Make sure that the antenna is properly connected to the TV.
- Loud speakers, unearthed audio devices, neon lights, high buildings and other large objects can influence reception quality. If possible, try to improve the reception quality by changing the antenna direction or moving devices away from the TV.
- If reception on only one channel is poor, fine-tune this channel.

There is poor picture quality from connected devices:
- Make sure that the devices are connected properly.
- Make sure that the picture settings are set correctly.

The TV did not save your picture settings:
Make sure that the TV location is set to **[Home]**. You can change and save settings in this mode.

The picture does not fit the screen; it is too big or too small:
Try a different picture format.

The picture format keeps changing with different channels:
Try applying specific picture format instead of **[Auto zoom]**.

The picture position is incorrect:
Picture signals from some devices may not fit the screen correctly. Check the signal output of the device.

The picture from broadcasts is scrambled:
You may need a Conditional Access Module to access content. Check with your service operator.

An "e-sticker" banner displaying information appears on the TV display:
The TV is in **[Shop]** mode. To remove the e-sticker, set the TV to **[Home]** mode, then restart the TV. See **Set up your TV > Other settings > Location** (Page 37).

The computer display on the TV is not stable:
- Make sure that your PC uses the supported resolution and refresh rate. See **Product specifications > Display resolutions** (Page 58).
- Change the TV picture format to **[Unscaled]**.

Sound issues

There is a picture but sound quality is poor:
If no audio signal is detected, the TV automatically switches the audio output off — this does not indicate malfunction.
- Make sure that all cables are properly connected.
- Make sure that the volume is not muted or set to zero.
- Make sure that the TV speaker setting is selected. Press **ADJUST**, select **[Speakers]**, then select **[TV]**.
- Make sure that the TV audio output is connected to the audio input on the HDMI-CEC enabled or EasyLink compliant home theatre device. Sound should be heard from the home theatre speakers.
- Some devices may require you to manually enable HDMI audio output. If HDMI audio is already enabled but you still cannot hear audio, try changing the digital audio format of the device to PCM ('Pulse Code Modulation'). Refer to the documentation accompanying your device for instructions.

There is a picture but the sound quality is poor:
Make sure that the sound settings are correctly set.

There is a picture but sound comes from one speaker only:
Make sure that sound balance is set to the centre.

Connection issues

There are problems with HDMI devices:

- Note that HDCP (High-bandwidth Digital Content Protection) support can delay the time taken for a TV to display content from an HDMI device.
- If the TV does not recognise the HDMI device and no picture is displayed, switch the source from one device to another and back again.
- If there are intermittent sound disruptions, make sure that output settings from the HDMI device are correct.
- If you use an HDMI-to-DVI adapter or HDMI-to-DVI cable, make sure that an additional audio cable is connected to AUDIO IN - Y/Pb/Pr or AUDIO IN - DVI/VGA (mini-jack only).

You cannot use EasyLink features:
Make sure that your HDMI devices are HDMI-CEC compatible. EasyLink features only work with devices that are HDMI-CEC compatible.

If an HDMI-CEC compliant audio device is connected to the TV and the TV does not display any mute or volume icon when the volume is muted, increased or decreased:
When a HDMI-CEC audio device is connected this behaviour is normal.

USB device content is not displayed:

- Make sure that the USB storage device is set to **Mass Storage Class** compliant, as described in the storage device's documentation.
- Make sure that the USB storage device is compatible with the TV.
- Make sure that the audio and picture file formats are supported by the TV.

Audio and picture files on your USB storage device do not play or display smoothly:
The transfer performance of the USB storage device may limit the data transfer rate to the TV which causes poor playback.

Network issues

You want to establish a wireless connection between your TV and home network:
Refer to **Connect your TV > Network and the Internet > Wi-Fi ready** (Page 51) for instructions on how to connect your TV wirelessly to your home network.

Smart TV does not work:
Check that the router is properly connected to the TV and that your router has open access to the Internet. If your router has a firewall or security settings, make sure that it allows Smart TV data to pass through - check your router documentation for details.

Open Internet access via Smart TV is slow:

- Try to improve the signal quality between the router and TV if you are accessing the Internet with a wireless connection. See the router's documentation for details.
- Always use a fast broadband connection wherever possible.
- Update your TV with the latest software to ensure that browsing speed is optimal.

Your Network is slow:

If you are accessing your PC with a wireless connection, see the router's documentation to improve the signal quality between the router and TV.

Wireless network is distorted or not found:

- Make sure that the wireless network is not disturbed by microwave ovens, DECT phones or other neighbouring Wi-Fi devices.
- If the wireless network is not working, try a wired network connection.

- Make sure that the firewalls in your network allow access to the TV wireless connection.

Contact Philips

Warning: Do not attempt to repair the TV yourself. This may cause severe injury, irreparable damage to your TV or void your warranty.

If are not able to resolve your problem, refer to the frequently asked questions (FAQs) for this TV at **www.philips.com/support**. You can also consult and contribute to the Philips TV community at **www.supportforum.philips.com**.

If you wish to speak to or email a Philips representative, contact the Philips Consumer Care in your country. You can find the contact details in the leaflet accompanying this TV or at **www.philips.com/support**.

Note your TV model and serial number before you contact Philips. These numbers are printed on the back of the TV and on the packaging.

7 Product specifications

Power and reception

Product specifications are subject to change without notice.

Power

- Mains power: AC 220-240 V~, 50-60 Hz
- Standby power consumption: < 0.15 W
- Ambient temperature: 5 to 40 degree Celsius
- For power consumption, see the product specifications at www.philips.com/support.

The power rating stated on the product typeplate is the power consumption for this product during normal household use (IEC 62087 Ed.2). The maximum power rating, stated between brackets, is used for electrical safety (IEC 60065 Ed. 7.2).

Reception

- Antenna input: 75 ohm coaxial (IEC75)
- TV system: DVB COFDM 2K/8 K,
- Video playback: NTSC, PAL, SECAM
- Digital TV: MPEG-4, DVB-T (Terrestrial), DVB-T2*, DVB-C (Cable), DVB-S/S2* (Satellite).
- Tuner bands: VHF, UHF, S-Channel, Hyperband

* Available on certain models only.

Display and sound

Picture/Display

- Display type: LED backlight, Full HD
- Diagonal size:
  - 81 cm / 32 inch
  - 94 cm / 37 inch
  - 107 cm / 42 inch
  - 119 cm / 47 inch
- Aspect ratio: 16:9 (widescreen)
- Panel resolution: 1920 X 1080 p
- Picture enhancement: Pixel Plus HD
- Perfect Motion Rate (PMR): 200 Hz

Sound

- Output power (RMS) @ 10% THD:
  - For PFL4007: 20 W
  - For PFL40x7: 28 W
- Incredible Surround
- Clear Sound
- Dynamic Bass Enhancement
- Mono / Stereo / NICAM

Display resolutions

Computer formats - HDMI (Resolution - refresh rate)

640 x 480 - 60 Hz
800 x 600 - 60 Hz
1024 x 768 - 60 Hz
1280 x 1024 - 60 Hz
1360 x 768 - 60 Hz
1600 x 1200 - 60 Hz
1920 x 1080 - 60 Hz

Computer formats - VGA (Resolution - refresh rate)

640 x 480 - 60 Hz
800 x 600 - 60 Hz
1024 x 768 - 60 Hz
1280 x 1024 - 60 Hz
1360 x 768 - 60 Hz
1600 x 1200 - 60 Hz
1920 x 1080 - 60 Hz

Video formats (Resolution - refresh rate)

480i - 60 Hz
480p - 60 Hz
576i - 50 Hz
576p - 50 Hz
720p - 50Hz, 60 Hz
1080i - 50Hz, 60 Hz
1080p - 24Hz, 25Hz, 30Hz, 50Hz, 60 Hz

Multimedia

Supported multimedia connections

- USB: NTFS, FAT 16, FAT 32. Connect only USB devices which consume 500 mA of power or less.

- Ethernet LAN RJ-45
- JPEG (*.jpg)

Supported image files

Supported audio/video files

Multimedia file names must not exceed 128 characters.

AV CLASS													
File Extensions	Container	Video codec	Maximum Resolution	Max. Frame Rate (fps)	Max. Bit Rate (Mbps)	Audio codec	USB	DLNA	CE-HTML	HTML5	HbbTV/MPEG/MHP	Video Store	YTLB
.mpg .mpeg .vob	PS	MPEG1	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AAC/ HE-AAC(v1&v2), DVD-PCM, AC3	YES	YES	YES	YES	NO	NO	NO
		MPEG-2	1920x1088	25p,30p,50i,60i	20 Mbps		YES	YES	YES	YES	NO	NO	NO
		H.264	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	YES	YES	NO	NO	NO
.ts	TS	MPEG-2	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AAC/ HE-AAC(v1&v2), AC3, E-AC3, Dolby Pulse	YES	YES	YES	YES	YES	NO	NO
		MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps		YES	YES	YES	YES	YES	NO	NO
		H.264	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	YES	YES	YES	NO	NO
.mp4	MP4	MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps	AAC/HE-AAC (v1&v2), AC3, E-AC3	YES	YES	YES	YES	YES	YES	NO
		H.264 HP	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	YES	YES	YES	YES	NO
		H.264 MP	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	YES	YES	YES	YES	NO
.mkv	MKV	MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AAC/ HE-AAC(v1&v2), AC3, E-AC3	YES	YES	NO	NO	NO	NO	NO
		H.264 HP	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	NO	NO	NO	NO	NO
		H.264 MP	1920x1088	25p,30p,50p,60p,60i	20 Mbps		YES	YES	NO	NO	NO	NO	NO

Supported audio/video files

Multimedia file names must not exceed 128 characters.

AV CLASS													
File Extensions	Container	Video codec	Maximum Resolution	Max. Frame Rate (fps)	Max. Bit Rate (Mbps)	Audio codec	USB	DLNA	CE-HTML	HTML5	HbbTV/MPEG/MHP	Video Store	YTLB
.asf .wmv	ASF	MPEG-2	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AAC/ HE-AAC(v1&v2), LPCM, AC3, WMA	YES	YES	YES	YES	NO	YES	NO
		MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps		YES	YES	YES	YES	NO	YES	NO
		WMV9/VC1 SP	1920x1088	30p,60i	20 Mbps		YES	YES	YES	YES	NO	YES	NO
		WMV9/VC1 MP	1920x1088	30p,60i	20 Mbps		YES	YES	YES	YES	NO	YES	NO
		WMV9/VC1 AP	1920x1088	30p,60i	20 Mbps		YES	YES	YES	YES	NO	YES	NO
.avi .xvid	AVI	MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AC3, LPCM, WMA	YES	YES	NO	NO	NO	NO	NO
		DivX 3.11	1920x1088	30p,60i	20 Mbps		YES	YES	NO	NO	NO	NO	NO
.flv	FLV	On2 VP6	-	-	-	MPEG-2 L3, AAC	NO	NO	YES	YES	NO	NO	YES
		Sorenson H.263	-	-	-		NO	NO	YES	YES	NO	NO	YES
.swf	SWF	Contains FLV	-	-	-	-	NO	NO	NO	NO	NO	NO	YES
.divx	DMF (DivX)	MPEG-4 ASP	1920x1088	25p,30p,50i,60i	20 Mbps	MPEG-1(1.1&L2), MPEG-2 L3, AC3, LPCM, WMA	YES	YES	NO	NO	NO	NO	NO
		DivX 3.11	1920x1088	30p,60i	20 Mbps		YES	YES	NO	NO	NO	NO	NO

Supported audio/video files

Multimedia file names must not exceed 128 characters.

AUDIO ONLY CLASS													
File Extensions	Container	Video codec	Maximum Resolution	Max. Frame Rate (fps)	Max. Bit Rate (Mbps)	Audio codec	USB	DLNA	CE-HTML	HTML5	HbbTV/MPEG/MHP	Video Store	YTLB
.mp3	MP3	-	-	-	384 kbps	MPEG-2 L3	YES	YES	YES	YES	YES	NO	NO
.wma .asf	WMA (V2 upto V9.2)	-	-	-	192-768 kbps	WMA	YES	YES	YES	YES	NO	NO	NO
.lpcm (PC) .pcm (pc)	LPCM	-	-	-	768 kbps	LPCM	NO	YES	NO	NO	NO	NO	NO
.wav (PC)	LPCM	-	-	-	768 kbps	LPCM	YES	YES	NO	NO	NO	NO	NO
.aac .mp4 .m4a	AAC	-	-	-	384 kbps 512 kbps 640 kbps 1024 kbps 3200 kbps	AAC, HE-AAC (v1&v2), AC3, E-AC3	YES	YES	YES	YES	YES	NO	NO

Supported subtitle formats

Multimedia file names must not exceed 128 characters.

SUBTITLE FORMATS										
File Extension	Format	USB	DLNA	CE-HTML	HTML5	HbbTV/MPEG/ MHP	Video Store		YTLB	YTLB
							Downloading	Streaming		
.srt	SRT	YES	NO	NO	NO	NO	NO	NO	NO	Windows-1252 (CP-1252) -Superset of ISO 8859-1 -Western Europe (Latin script or alphabet)
.sub	SUB	YES	NO	NO	NO	NO	NO	NO	NO	
.smi .sami	SAMI	YES	NO	NO	NO	NO	YES	NO	NO	
.avi .divx	XSUB, XSUB+	YES	YES	NO	NO	NO	NO	NO	NO	-

Supported DLNA-compliant media server software

- Twonky Media (for Microsoft Windows and Mac OS X)
- Windows Media Player (for Microsoft Windows)
- Sony Vaio Media Server (for Microsoft Windows)
- TVersity (for Microsoft Windows)
- Nero MediaHome
- DiXiM (for Microsoft Windows XP)
- Macrovision Network Media Server (for Microsoft Windows)
- Fuppes (for Linux)
- uShare (for Linux)
- AwoX
- CyberLink
- JVC media server
- MediaTomb
- Buffalo LinkStation Live

Connectivity

Rear

- Ethernet LAN RJ-45
- AUDIO IN (DVI/VGA): stereo 3.5 mm mini-jack
- Y/Pb/Pr and AUDIO IN (Y/Pb/Pr): Component video and audio L/R mini adaptors
- SERV.U: Service port
- VGA: PC input
- SCART (RGB/CVBS): SCART mini adaptor
- HDMI 1 ARC: HDMI Audio Return Channel
- HDMI 2/3: HDMI
- TV ANTENNA: 75 ohm coaxial
- SAT: F-pin satellite (available on certain models only)
- USB

Side

- CI: Common Interface
- Headphones: stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT (OPTICAL): Optical
- USB
- HDMI SIDE

Supported TV mounts

You can mount your TV on the wall with a compatible TV mount (sold separately). Select the type of TV mount for your TV screen size:

81 cm / 32 inches: 200 mm x 200 mm, M6
94 cm / 37 inches: 200 mm x 200 mm, M6
107 cm / 42 inches: 400mm x 400mm, M6
119 cm / 47 inches: 400 mm x 400 mm, M6

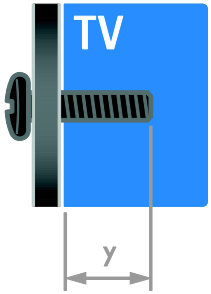
Warning: Follow all instructions provided with the TV mount. Koninklijke Philips Electronics N.V. bears no responsibility for improper TV mounting that results in accident, injury or damage.

To prevent damage to cables and connectors, leave a gap of at least 5.5 cm / 2.2 inches from the back of the TV.

Before you mount the TV on the wall, find the correct length of the screw.

To find the length of the screw, add the thickness of your wall mount to the screw length (y), as shown in the graphic.

For 32 inch models: 18 mm
For 37 - 47 inch models: 17 mm



Help version

UMv 313913705181 - 20111231

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Document order number 313913705181